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EMPIRICAL STUDIES OF INCOME-TAX COMPLIANCE [1]

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Introduction

STUDIES of tax compliance in the United States have been aggregate studies proceeding either by intensive audit of a sample of the universe of federal income-tax returns [2] or by a comparison of income estimates with income reported for tax purposes. [3] These studies were pioneering ventures that provided illuminating and highly important information. But they had certain inherent limitations [4] and the full detail uncovered by the audit study was never disclosed to the public. It seemed to us desirable therefore to attempt some research that would start at

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[1] This is the first of two articles on income-tax compliance and administration. The second article will be published in a subsequent issue. The studies were financed in large part by a grant from the Rockefeller Foundation.

[2] U. S. Treasury Department, *The Audit Control Program*, May, 1951.

[3] Selma F. Goldsmith, "Appraisal of Basic Data Available for Constructing Income Size Distributions," *Conference on Research in Income and Wealth* (New York: National Bureau of Economic Research, 1951), Vol. 13, pp. 267-377; Daniel M. Holland and C. Harry Kahn, "Comparison of Personal and Taxable Income," *Federal Tax Policy for Economic Growth and Stability*, Joint Committee on the Economic Report, 84th Congress, 1st Session, 1955, pp. 313-338.

[4] Discussed in the subsequent article.

the other end of the stick so to speak; that is, a project that would make an intensive study of a particular area. Such a study would have the limitation that it would not afford results that could be generalized nationally; however, it might have the advantage that it would disclose the anatomy of noncompliance in greater detail than other approaches and that it might suggest a methodology that could, with suitable resources and a more general access to income-tax returns, be used by others to give definitive answers as to the degree of noncompliance and its breakdown. By coupling the study with some examination of administrative techniques (future article), we hoped to indicate ways and means by which the latter could be improved.

More specifically the proposal was to ascertain unreported income and failure to comply with tax obligations by a territorial and sector-of-income approach, hunting with a shotgun, so to speak, where an auditor hunts with a rifle. We would ascertain income by source for a small block of the income-tax universe and use every means available to do so—interviews (especially with the *payers of income*); estimates of expense backed by intensive study of the area; and many other items of supple-

mentary information differing with each source studied. Results obtained would be checked against the returns rendered and nonreporting of income would, where possible, be translated into noncompliance with tax obligations.

A Wisconsin study was indicated both by the fact that returns are uniquely available in that state and because the Wisconsin Tax Department pledged its full cooperation. The pledge was fully honored; without this assistance the study would have been impossible. Income-tax compliance in Wisconsin should be a case of compliance at its best, because here relatively good overlapping federal and state administrations reenforce each other. Checking Wisconsin returns would not be conclusive as to federal reporting, but it would be highly indicative; cooperation between administrators has developed to the point where little difference in product is expected.

Whether any of these studies was successful in accomplishing its objectives we leave to the reader. Certainly many more difficulties were encountered than had been expected. Studies of interest, dividends, rent and farm income were attempted. This article will focus largely on the latter two; most attention will be given the rent study because we regard it as the most definitive; however, the farm study proved to us the most intriguing.

Rental Income

The study of rent here reported [5] was confined to residential rent in one Wisconsin city.[6] Our study excluded com-

mercial rent and residential rent received by corporations. It is not unlikely that compliance scores in the case of these types of rent would prove higher than for the type studied. Excluded also were structures characterized by rental transiency—hotels and motels and other structures not amenable to our type of investigation, such as hospitals, dormitories, army barracks, fraternities, and so forth.

First task involved the selection of a sample that would give each landlord of rented residential property a designated, equal probability of being selected in a sample of landlords. We cannot attempt to describe the process in detail here and shall have to impose upon the reader's credulity to share our confidence that it was performed with ample care and advice.[7] By using a building structure as the unit of sampling, it was possible to interview all of the renters of a particular structure, or at least all the renters necessary to establish with some certainty the amount of gross rent arising from the building. In turn, this full accounting of rental payments could then be related to comparable data from the income-tax returns of the landlords. Our sample included

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[5] Most of the work on this study was done by Milton Taylor, then a member of our staff and now Professor of Economics at Michigan State University.

[6] A further study of residential rent in a Wisconsin village was attempted but for reasons that need

not be explained here the results were not regarded as dependable.

[7] The procedure involved the development of a probability model. The sample unit selected was the "structure" which was used either in whole or in part for residential purposes. A two-stage sampling procedure was used with a between-block interval of 3 and a within-block interval of 6. Blocks with more than average numbers of renters and structures were so handled as to double their probability of falling in the sample. The size of the sample, we should concede, was determined more by resources of time and staff than by technical criteria of adequacy. The adequacy factor could not be tested; we are confident that the results as a whole are representative for the particular city studied; they are not adequate for all of the detailed breakdown as later indicated; and, of course, their representativeness for other cities or the country as a whole are matters we have not studied.

335 landlords[8] which was 6.2 per cent of the estimated number of residential rented structures.

Precautions were taken to do a proper job of interviewing: personnel were carefully chosen and instructed, a preliminary questionnaire was pretested, and so forth. While the purpose of the interview was not fully revealed to the parties interviewed,[9] precaution was taken at every stage to guarantee the confidential character of data pertaining to particular individuals. It was apparent from the outset that a research objective and an enforcement purpose could not be combined.

Out of an original total of 1129 structures, 625 units were found to be owner-occupied; there were 86 instances of "non-response" in which it was not possible (3 calls) to make contact with persons living in the selected buildings; an additional 65 cases proved to be unusable for a variety of reasons, such as a vacancy or ambiguous information. There were 26 cases in which persons living in the selected buildings refused to be interviewed. A few other cases were eliminated because of ambiguities on tax returns: the reporting of several properties in an aggregate account, reporting of only gross or net data, and the like.

Classified by type of facility our sample included 205 cases of multiple units (apartments and flats); 63 cases of rooms; 48 cases of single-unit structures; 8 of garages, and 11 of subletting. The multiple-unit cases varied in character from so-called "flats," usually with 3 or less units including the unit occupied by the owner, to large apartment houses ranging to over 100 apartments. Rooming facilities included both "incidental rooming" and "operating a rooming house."

It seemed advisable to make a distinction in our data according to the responses of tenants. Cases were classified depending on whether the estimate of gross rent was considered to be "good," "average," or "poor"; approximately 32 per cent, 54 per cent, and 13 per cent of the cases fell into these categories, respectively. The first two classes we considered substantially reliable and the third less dependable but not useless; clearly ambiguous and incomplete cases were deleted from the sample.

In the class of multiple units we found 182 cases and $304,865 of estimated gross rent available for comparisons with tax returns. The comparison yielded the following results: there were eight cases, totaling $11,261 in estimated rent, in which landlords filed an income-tax return but did not declare rental income; there were 23 cases totaling $25,686 in estimated rent where no income-tax return was filed; in the remaining 151 cases, totaling $257,917 in estimated rent, landlords filed income-tax returns and declared rental income: here a direct comparison between estimated and reported rent was possible.

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[8] 324 structures plus 11 cases of subletting.

[9] Our research team was confronted with this dilemma: in the interest of honesty and public relations we would have much preferred to have made a clean breast of "what we were up to"; in the interest of obtaining all the information we needed, the consensus was that this might prove fatal. We resolved on the basis of what we considered the public interest in favor of an honest but limited disclosure. This leaves us open to the charge of obtaining information on false or at any rate not fully disclosed pretenses. And it raises questions as to how frequently such research could be repeated. One might suppose that the American people would voluntarily cooperate in providing information that might disclose tax delinquency for other people (not identified as to individuals); but it is at least doubtful that such is the case.

The eight cases in which landlords reported no rental income when filing their income-tax returns represent the clearest instance of noncompliance. It amounts to nearly 4 per cent of total estimated gross rent. Only two of the eight cases represent sizeable amounts, one for $3,961 and the other for $3,810. The 23 cases for which no income-tax returns were filed represent a persuasive but not altogether certain case of noncompliance. Care was first taken to ensure that there was no ambiguity with regard to ownership. Both property-tax data and the records of the Register of Deeds were checked. Then in each of the 23 cases, city directories and telephone books were examined to confirm that landlords had a filing liability in the city during the relevant year. The main apparent technical chance of error is the misfiling of income-tax returns, but this happens very infrequently.[10] Seven out of the 23 cases had an estimated gross rent of less than $600 (Wisconsin's filing limit), and if these rental incomes were the only source of taxable income to the landlords, the latter would have no filing liability. Calculations were made both on the assumption that these cases involved a filing liability and that they did not. On the first assumption, that all 23 cases involved a filing liability, the noncompliance on the part of nonfilers represents 8 per cent of the total estimated gross rent of this class of landlords.

The remaining 151 cases reporting rent reported generally quite faith-

fully; the understatement of gross rent amounted to only $8,236 or nearly 3 per cent of the total estimated gross rent from all multiple-unit cases.

The total score in the reporting of estimated gross rent for multiple unit structures was determined within a range of 85.18 per cent to 86.18 per cent, depending on the assumptions regarding nonfilers explained above. Further detail was computed to show a breakdown by flats and apartments, but concerning this we can only record here that the latter showed a considerably better score.

Space does not permit a similar analysis of other types of facilities where similar but not identical problems were encountered and were similarly treated. Table I presents a summary of gross-rent noncompliance by types of units and indicates a composite score of 80 per cent to 81 per cent for all types combined. It will be noted that renter subletting and garages show a very low level of compliance, but they are also relatively unimportant in the total picture and our sample in these cases is too small to be reliable. A further datum may be added, namely that of those who filed and reported rent in the overall picture the figures reported were 96 per cent of the estimates.

Landlords may evade net rental income on tax returns in two ways, either through the underreporting of gross income or through the exaggeration of expenses. In moving from gross to net rentals in our estimates it was not possible to follow the procedure used in developing the estimates for gross rentals. Tenants were found to be very vague concerning such items of expense as repairs and maintenance. They would recall that a plumber had been

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[10] A test of filing accuracy was attempted. The only factor of accuracy that could be examined was that of faithfulness in following the alphabet. Six hundred twenty folders were examined, out of which 11 were misplaced. However, in almost all of these cases the out-of-place folder was within a few files of the proper place and could be found easily.

on the premises, for example, but they did not know whether he changed a washer or undertook a major repair. And, of course, renters usually have no knowledge at all concerning such expense items as depreciation, interest, and utilities. Interviewing landlords in order to obtain reliable information also proved to be unsatisfactory.

Decision was made to derive significant ratios through interviewing a sample of property-management experts. The ratios of interest were the average net return that may be expected on capital invested in rental housing and

As an alternative, we also employed the technique of reconstructing expense items for each individual property. A number of expense items like property taxes, water expense, interest, and depreciation could be and were checked specifically for each property. Certain other items, such as repairs and maintenance and heating expense, could be approximated by "rules of thumb." Illustrative is the belief among real-estate men that repairs and maintenance require on the average one month's gross rental. Some landlords will spend more than this amount for repairs and

TABLE I

SUMMARY OF GROSS RENT NONCOMPLIANCE FOR ALL TYPES OF UNITS

Type of unit	Number of cases	Estimated rent	Reported rent	Noncompliance	Ratio of nonreported gross rent to estimated	Ratio of reported gross rent to estimated
Multiple units ..	182	$304,865	$259,681	$42,220 to $45,184	13.84 to 14.82	85.84 to 86.16
Rooms	62	52,739	35,459	16,747 to 17,280	31.76 to 32.77	67.23 to 68.24
Single units	47	41,342	26,776	13,876 to 14,567	33.54 to 35.24	64.76 to 66.46
Renter subletting	10	4,484	1,006	2,872 to 3,478	63.95 to 77.46	22.44 to 36.05
Garages	8	495	193	302	61.01	38.99
Total	309	$403,925	$323,113	$76,008 to $80,811	18.62 to 20.01	79.99 to 81.18

the ratio of expense to gross income (or alternatively of net to gross income) that may be expected with each of several types of rented property. Interviews were consummated with 17 different real-estate firms in the selected city. There was a marked consensus of opinion among the persons interviewed. Invariably the interviewee stated, for example, that the net return on capital invested in flats was within a range of 8 to 10 per cent, while single units earned a net return of 4 or 5 per cent. The percentages we accepted were an arithmetic average of all these estimates. The consensus was that expenses run to about 50 per cent of gross regardless of the type of structure.

maintenance while others will spend less. Average costs of heating were computed by engineering consultants who are familiar with the relative costs and efficiencies of various fuels and the proportionate variation in costs associated with different sizes and types of structures. Average consumption costs of gas and electricity were supplied by the local utility company. And so on. There were a few miscellaneous items, such as fire insurance and advertising, for which we found no basis for approximation, but their importance in the total picture was small and we accepted in these cases the amounts claimed on returns.

On the basis of the above approaches,

three independent estimates with some exceptions were made of expenses by types of units and types of expense. In some cases the ratio methods proved unfeasible. This was particularly true in the special case of incidental renting of rooms in the room-rent category. In this area quite a few cases were found too where landlords neglected to deduct all of the expenses to which they were entitled. An allowance for calculated expense was added in these cases. Where the three methods were used the estimates showed very little variation in results. Ultimate answers (ratios of reported to estimated net rent) differed in no case by more than 5 per cent. In our final calculations we averaged these results.

It may be noted at this point that any relative understatement of gross rent is magnified substantially in percentage terms when it is related to net income. Assume a hypothetical business with a gross income of $100 and a ratio of expense to gross income of 50 per cent. Assume further that all expenses are properly reported and that accordingly the true net income is $50. Assume now that gross is underreported by 20 per cent; this gives us the following data:

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Gross income  ..................... $100
Reported gross ...................    80
Expenses .........................    50
Reported net  ....................    30
True net .........................    50
Ratio of reported to true net income  60
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If now we also assume that expenses are overreported to the extent of 10 per cent, that is, in the above illustration at $55, we get reported net income of $25 and a 50 per cent compliance ratio. It will be observed from our tables that this is approximately what appears to have happened in our sample of landlords.

Table II shows the detail of the ultimate findings. It shows a ratio of aggregate reported to aggregate estimated net rent of nearly 51 per cent.

Two supplementary phases of the study may be noted briefly. A special analysis of expense items showed that errors in reporting these items are not general or uniform. The ratio of claimed to estimated expenses is relatively high for repairs and maintenance, furniture depreciation, equipment depreciation, and telephone expense. Several of the other items are modestly overreported while two items, taxes and water, have estimated expenses (and in

TABLE II

SUMMARY OF GROSS AND NET RENT COMPLIANCE

Type of unit	Number of cases	Ratio of reported gross rent to estimated gross rent	Ratio of reported net rent to estimated net rent
Multiple units ..	182	86.16	56.10
Rooms	62	68.24	25.39
Single units	47	66.46	48.06
Renter subletting	10	36.05	16.58
Garages	8	38.99	78.14
Total—All cases	309	81.18	50.74

this case they are actual) larger than claimed expenses. Two expense items, repairs and maintenance, and depreciation, account for approximately 75 per cent of all the overreporting of expenses and the item " repairs and maintenance " alone represents about 50 per cent of overreporting. Landlords often depreciate both land and buildings and sometimes even adjoining lots.

An effort was also made to determine the tax-liability noncompliance in relation to proper tax compliance. For the major traffic (those reporting net income and rent) this was done in the aggregate; that is, the average reported taxable income was determined along

with the marginal rate at which incremental additions to that average income should be taxed. The average nonreported rental income was also determined along with the additional tax that would have been collected had this income been reported. To get a tax-compliance ratio one prorates the present tax between rental income and other income; also the proper tax between ascertained rental and other income (assuming the latter to be correct as stated). He then compares his two answers.[11] The tax-compliance record was found to be 47 per cent as compared with the net-rental-income-compliance ratio of nearly 51 per cent.

The above explanation omits the special treatment necessary for two types of taxpayers—the nonfilers and filers not now liable to tax. The filers without tax liability were not numerous and were treated individually. The nonfilers posed a problem and projection of a tax liability for them proved to be more a matter of speculation than precise measurement. Nothing is finitely known about the income or exemption status of these landlords. The arbitrary assumptions were made that the net rental income for each case was equal to the sum of all other income received and that each landlord is entitled to two exemptions. The total effect of these assumptions is not crucial to the main conclusion.

One should beware of indicting all income-tax administration on the basis of any evidence here produced. Our study covers only one part of one kind

[11] Thus if A has an income of $2,000 and reported rental income of $1,000 and a tax of $10, the tax on his rent is $5. If he should have reported $1000 more in rent, his income should have been $3,000 and his tax perhaps $24. The hypothetical tax on his rent would be $16 and his compliance score 5 out of 16 or about 30 per cent.

of income in one area. Calculations based on national data indicate that personal-rent income in 1954 was less than 2.5 per cent of total personal income. Residential rent is one of the more difficult areas that income-tax administration is expected to police. However, it should not be too difficult to check rented properties, income from which goes entirely unreported. These could be ascertained from property-tax records. Some approximation of gross income could be calculated by inquiries as to unit-rent payments. Net rent would be much more difficult; here an inquiry or audit might be indicated if returns depart radically from well-established norms.

Farm Income

It is commonly agreed that, of all groups which the income tax seeks to reach, farmers are the most difficult. Indeed the point is often made that in counties and states that are largely agricultural, the income tax cannot be expected to play much of a role. The problem of applying the income tax to farmers is compounded by many difficulties but two well-known aspects are major: farm income is largely in the class of smaller self-employment income, a class that is badly neglected by income-tax administration on the ground of low productivity in relation to effort; and farm record-keeping, while considerably improved, still leaves much to be desired. In addition to these difficulties, farm income and expense often occur in small amounts which can easily be overlooked or exaggerated.

From the outset of our study it was obvious that the best we could do with this source of income would be to make aggregate estimates of income for limited areas and compare these with tax

reports from the same areas. This might provide no information not already available on a national scale, but it was hoped that it might provide a firmer basis for limited conclusions and afford more detail on the anatomy of noncompliance.

Because of the size of the State and the decentralization of its tax administration, it was obviously unfeasible to attempt a state-wide sample of farmers. A county-wide sample might have been more manageable, but it was precluded by the plan of procedure in acquiring information. Accordingly, the territorial unit selected for study was a Wisconsin town (township) and the original sample consisted of all the farms in the town, typically from 100 to 200 in number.[12] Three towns were studied,[13] the number being dictated by the available resources. Towns were selected on the basis of accessibility and the quality of information available in them. Some diversification, both in location and type of agriculture, was sought. But the towns are similar in that the predominant sales factor in each case was milk with important collateral income largely in the sale of cattle and hogs (and in one town, tobacco).

The farms studied averaged 130 acres, with 61 per cent in harvested crops. In the case of fully-filing farms (all operators filed returns), tax reports showed 51 per cent of receipts from dairy products, 19 per cent from swine sales, 10 per cent from cattle sales,

over 5 per cent from tobacco, 5 per cent from poultry and eggs and smaller percentages from many miscellaneous sources.

Our hope was that we could get and rely on market data (payments by processors and shippers to farmers) for our major objective source of information on gross income. We were successful in securing the cooperation of most of the intermediaries who made their records of purchases and payments available to us. But we were unable to get market data which covered all of the sales by all of our farmers, even in the cases of milk and tobacco where our success was greatest. For part of our study of each income source, and all of it in the minor categories, we relied upon sophisticated estimates based upon physical factors in the area (such as the number of livestock as indicated by the assessor). The productive capacity of these factors was indicated by government publications, such as the *Wisconsin Crop and Livestock Reporter*, and by reports to the Southeastern Wisconsin Cooperative Management Association, an accounting and management-advisory service which received reports from a number of farms in the general area of our sample. The service is conducted with a high degree of care and includes not only regular reports, but also visits by management authorities to member farms. Account was taken of the fact that these farms were somewhat above average both in quality of farm and the character of their management.

Tracing through in some detail the procedure followed with regard to milk we observe first that here we have a source of income where circumstances greatly favor not only ascertainment of the facts, but also full compliance. A farm will ordinarily maintain continu-

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[12] The towns selected included 439 farms of which 364 were used in our estimates. Exclusions were a miscellaneous category including such items as farms crossing town lines, noncommercial farms, highly specialized farms (mink); and cases where reporting on income-tax returns was ambiguous.

[13] Assisting in this project were Wayland Gardner, John Gronouski and I. F. Hall; the former has completed a doctor's dissertation on the project: Wayland Gardner, *The Income Tax Compliance of Farm Income*, University of Wisconsin, Madison, 1958.

ous relations with a single processor throughout the year and the processor maintains an account of monthly payments to the farmer. Cross-checks are also easy; milk sales are closely related to the number of milk cows and productivity figures narrowed at least to counties are readily available.

Basic data were obtained from major dairy processors. In most cases it included pounds of milk, payments to farmers and the purchase of supplies, offset against payments. Even so our market data were far short of complete or perfect: there were cases of confusion where a farmer maintained two or more accounts or where he changed from one dairy to another in the course of the year. The adjustment for hauling charges (amounting to about 6.6 per cent of gross) was not always evident. And some small processors (such as cheese factories) may have been overlooked. In addition, in one of our towns, one large processor had no records available for inspection.

Fully-filing farms were divided into three groups: (a) those in which market data equaled or exceeded reported income; (b) those in which reported income exceeded market data by less than 5 per cent; and (c) those in which reported income exceeded market data by 5 per cent or more. The first category was the largest of the three and the second relatively minor. The gap between market data and reported income in the first category was a clear case of noncompliance and, on the assumption that market data were perfect, it amounted to 7.6 per cent of apparent receipts. The second class was given a score that recognized some degree of overreporting and some degree of incompleteness in market data. The third class was treated by independent estimate. The resulting estimates were cross-checked

with production estimates per cow derived from Farm Management Association records and the Wisconsin Crop and Livestock Reporting Service. The selected figure of compliance with regard to dairy products on fully reporting farms was 93.4 per cent.[14]

Much the same procedure as that described above was used to estimate the gross receipts from hog sales and cattle sales, except that here less reliance could be placed on market data and a larger number of farms were not covered by that data at all. Nevertheless in the case of swine such data for two of our three towns showed a deficiency in reporting for over one-quarter of the product (73.5 per cent). A complication in the case of swine was the irregular traffic in so-called " feeder pigs " (purchased, fattened, and sold during short periods). In the case of cattle, the chief complicating factor was the irregular sale of bred heifers to special buyers. Again cross-checks were made with published data. A compliance score of 78 per cent in the case of hogs and 72.6 in the case of cattle sales was indicated.

Market data for tobacco sales was especially good and complete, in this case gathered from the government agency in charge of acreage allotment. Compliance was also especially high; a score of 95.4 per cent was accepted. Here no cross-check by physical-factors analysis appeared necessary. On the other hand, in the case of poultry and eggs no market data were available and sole reliance on estimates based on assessors'

14 Not all the detail in the estimates can be reported here: account was taken of prices, of milk fed to calves, of underenumeration by assessors; of comparative equalized value of livestock in the county under consideration. We recruited at once an agricultural economist (I. F. Hall), who had had many years of experience both with farming and the survey of farm accounts. His advice was useful at many points.

enumeration and productivity data provided by the State Department of Agriculture was necessary. As expected, the compliance score in this case was low (50 per cent). Miscellaneous receipts covering such items as crop sales, custom work, sales of sheep and wool, government payments and so forth could be checked only against reports made to the Cooperative Management Association and published statistics for the area. A score of 68.9 per cent was accepted.

Table III shows a summary of the results of the analysis described above.

TABLE III

Estimated Gross-Receipts Reporting Compliance on Fully-Filing Farms by Receipt Source

Receipt source	Reported	Estimated	Score
Dairy products *	$1,391,578	$1,498,883	93.4%
Swine, net	523,494	671,146	78.0
Cattle, net	263,503	362,952	72.6
Tobacco *	146,721	153,796	95.4
Poultry and eggs	129,993	259,986	50.0
Miscellaneous .	290,206	420,966	68.9
Total	$2,753,495	$3,367,729	81.8%

* Amounts for dairy products and tobacco were after an adjustment to account for the occasional practice of reporting these items net of freight or marketing expense.

It was obvious from the beginning of our project that we could not use market data for an analysis and check on farm expenditures. They are too scattered and too miscellaneous to lend themselves to such procedure. Best alternative appeared to lie in developing a typical or average ratio of expenditures to gross income. The Farm-Management data collected by the College of Agriculture appeared to be the best source of information. Unfortunately, the Management sample was found to include somewhat larger and presumably better farms (or farmers) than our own sample. First investment, ac-

cordingly, was in studying the Management data to ascertain whether they showed any significant correlation between size and profitability of farms and expense ratios. No significant correlation was found. A cross-check was made by estimating expenses on the basis of the relation of expenses to physical factors, such as numbers of livestock and crop acres. Eventually the ratio as shown by the Management data was accepted (71.9 per cent). The figure is exclusive of interest paid by the farmer. It seemed high and it indicated substantial underclaiming of expenses by our sample (12.7 per cent). We thought this incredible at first, but we found it in accord with a substantial body of opinion including that of the personnel in the office of the Management Association and some of the intermediaries (those who assist farmers in preparing income-tax forms) whom we interviewed.

Final compliance score for fully-filing farms is summarized below:

	Reported	Estimated	Score
Gross receipts ..	$2,753,495	$3,367,729	81.8%
Deductions	2,021,507	2,316,757	87.3
Net farm income	$ 731,988	$1,050,972	69.6%

An independent analysis was made for farms involving partial filing or nonfiling. The former term covers cases where persons known to have an interest in a farm did not file, whereas other persons on the same farm did submit a return. There were 19 partially filing farms and 33 from which no return had been submitted. An analysis of the physical characteristics of these farms showed that in general they were quite similar to fully-filing farms. The Wisconsin filing requirement is so low ($600, gross) that it could be assumed that all income accruing to these farms was subject to a reporting liability. Accordingly, estimating procedure similar

to that used on fully-filing farms was applied. The compliance score as modified by this final alteration appeared as follows:

Dairy	85.6%
Swine	72.9
Cattle	67.1
Tobacco	89.9
Poultry and eggs	46.8
Miscellaneous	66.1
Total	75.8
Farm deductions	87.3
Net farm income	64.6

An effort to relate reporting noncompliance to tax noncompliance led to the conclusion that this could not be done with sufficient precision to warrant even an approximation. Farm income ran the gamut of bracket rates and was mixed in a great variety of patterns with other income. A great deal would depend upon how the unreported income was distributed among individuals and this information we did not have. Some of the unreported income was obviously exempt (covered by unused exemptions) and some of it would have been taxed at a higher effective rate than the income reported and taxed. Analysis of the relationship between the possible magnitudes of these two factors produced the confident conclusion that the tax-compliance score for farm income was at most not higher than the income reporting score.

Our data were intensively examined to derive some approximation of the margin of error. The extreme limits indicated by this calculation produced a range from nearly 55 per cent to 80 per cent compliance. However, this assumed maximum errors cumulating in one direction or the other. We concluded that a much more reasonable range would be 60 to 75 per cent.

In the case of people who keep few accounts and who do not themselves know what their income is, it would certainly be presumptuous to claim a fine score of precision in estimates.

As to conclusions and recommendations growing out of the farm study, the most striking fact disclosed was the underreporting of farm expenses. This points to the conclusion that underreporting is predominantly a matter of inadequate records and insufficient sophistication on income-tax procedure. These shortcomings might yield to a more adequate educational and informational service. Source information, particularly for dairy income, could be readily supplied if it were sought. Expanded auditing effort, directed in part by net-worth evidence, is an obvious remedy and one that would affect many farmers not covered directly.

Other Studies and Conclusion

Space does not permit a detailed account of our studies in the area of dividends and interest. In the former case we checked in two of the State's income-tax offices some 433 items of dividends paid by one Wisconsin corporation to Wisconsin residents. The compliance score (approximately 96 per cent) was impressively high. We accounted for this on the ground that these payments (above $100) are regularly covered and processed in the State by information at the source. Our studies of interest received also ranged higher than we had been led to expect by national aggregate investigations. But they were fragmentary and omitted certain types of interest least amenable to administrative inspection. In the case of mortgages and notes, compliance appeared to range from 82 to 86 per cent.[15]

If our efforts should result in further and improved studies of this character, our investment would be highly rewarding.

15 These studies are included in a doctoral dissertation by Norman Adler, *The Administration of the Individual Income Tax with Respect to the Receipt of Wages and Salaries, Interest, and Dividends*. University of Wisconsin, Madison, 1958.

THE FINANCE OF LOCAL GOVERNMENT IN ENGLAND AND WALES SINCE 1948: Part I

ALAN WILLIAMS *

I. INTRODUCTION

IN the last decade the spate of legislation seriously affecting local-government finance in England and Wales has been matched only by the flood of proposals and counterproposals for futher reform. The latest official moves, embodied in the Local Government Act, 1958, are already the target of precisely the same sort of criticisms that were levelled at earlier attempts to solve the problem; it would be foolish to suppose that (even a temporary) cessation of hostilities is a likely prospect on this front. However, ten years have now elapsed since the major postwar legislation was enacted in 1948, and the last three years have seen a remarkable outburst of first-rate research studies into almost every aspect of the local-finance problem. This seems, therefore, a good time to survey the battlefield—to find out where the contestants now stand— and to attempt an appraisal of the relative strength of their positions.

But, before getting to grips with the particular problems about which the battle has raged most fiercely, it is essential to be quite clear, in one's own mind at least, as to what the policy objectives are supposed to be. Otherwise it becomes impossible to judge the relevance, let alone the effectiveness, of the various financial measures that have been taken. As is usually the case in these matters, disputes about the means to be employed often turn out to be the result of disagreement about ends. Since protagonists often take ends for granted without stating them explicitly, some time may elapse and much effort be wasted, before it becomes obvious what the dispute is about. For the sake of clarity, then, some attention must first be paid to the respective roles of central government and local authorities.

There are two extreme positions. The one is that local authorities are independent organisms with inalienable rights, responsible only to their own electorates. Gratuitous interference by the central government in their affairs would be regarded as an unwarranted breach of local autonomy. The other is that local authorities exist by consent of, and in a form determined by, the central government. Such discretionary powers as they are permitted to enjoy are delegated to them from the center. The exercise of these powers must not be permitted to jeopardize the efficient discharge of those responsibilities specifically enjoined upon them as agents of the central government. In practice, of course, these extreme positions are seldom found. They are of interest only as a means of polarizing the content of the various intermediate blends of central direction and local autonomy that are in fact embraced as the ideal.

Let me therefore state the axioms which summarize my own political prejudices:

1. Government Departments are assumed to behave in accordance

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TABLE I

UNITED KINGDOM DOMESTIC EXPENDITURE ON GOODS AND SERVICES AT MARKET PRICES

(Amounts in millions)

Type of expenditure	1938	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Current expenditure											
1. Consumers	£4,394	£ 8,475	£ 8,847	£ 9,358	£10,065	£10,609	£11,235	£11,984	£12,826	£13,518	£14,174
2. Public authorities	772	1,762	1,978	2,072	2,443	2,898	3,052	3,139	3,213	3,492	3,583
2a. Central government	463	1,233	1,437	1,508	1,815	2,211	2,320	2,356	2,372	2,541	2,523
2b. Local authorities	309	529	541	564	628	687	732	783	841	951	1,060
3. Gross capital formation*	656	1,630	1,671	1,519	2,496	2,189	2,517	2,633	3,158	3,419	3,852
Total	£5,822	£11,867	£12,496	£12,949	£15,024	£15,696	£16,804	£17,756	£19,197	£20,429	£21,609

(Per cent of total)

Type of expenditure	1938	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Current expenditure											
1. Consumers	75.5%	71.4%	70.8%	72.3%	67.1%	67.6%	66.9%	67.5%	66.8%	66.2%	65.6%
2. Public authorities	13.3	14.8	15.8	16.0	16.3	18.5	18.2	17.7	16.7	17.1	16.6
2a. Central government	8.0	10.4	11.5	11.6	12.1	14.1	13.8	13.3	12.4	12.4	11.7
2b. Local authorities	5.3	4.5	4.3	4.4	4.2	4.4	4.4	4.4	4.4	4.7	4.9
3. Gross capital formation*	11.3	13.7	13.4	11.7	16.6	13.9	15.0	14.8	16.5	16.7	17.8
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

*Including inventory adjustment.

Source: Central Statistical Office, National Income and Expenditure, 1958 (London: HMSO, 1958), Tables 1, 4, and 5.

TABLE I A

PUBLIC AUTHORITIES' CURRENT EXPENDITURE ON GOODS AND SERVICES AS PERCENTAGE OF TOTAL CURRENT EXPENDITURE ON GOODS AND SERVICES

	1938	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
4. Total current expenditure (sum of lines 1 and 2 above)	£5,166	£10,247	£10,825	£11,430	£12,528	£13,507	£14,287	£15,123	£16,039	£17,010	£17,757
Central government proportion (line 2a as % of line 4)	9.0%	12.0%	13.3%	13.2%	14.5%	16.4%	16.2%	15.6%	14.8%	14.9%	14.2%
Local authority proportion (line 2b as % of line 4)	6.0	5.2	5.0	4.9	5.0	5.1	5.1	5.2	5.2	5.6	6.0

TABLE II

CURRENT ACCOUNT OF LOCAL AUTHORITIES AT MARKET PRICES

(Amounts in millions)

Expenditure	1938	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
1. On goods and services	£309	£529	£541	£564	£628	£687	£732	£783	£841	£951	£1,060
2. Interest	68	66	72	81	89	104	123	142	162	191	221
2a. To central government	*	22	29	37	46	58	76	86	98	112	118
3. Transfer payments	30	52	50	53	57	66	68	75	95	109	114
4. Current surplus (gross)	75	78	81	79	81	82	114	118	109	118	139
Total	£482	£725	£744	£777	£855	£939	£1,037	£1,118	£1,207	£1,369	£1,534
Revenue											
5. Rates	£212	£317	£326	£337	£364	£392	£433	£462	£478	£555	£616
6. Current grants from central government	133	281	287	297	335	371	397	421	469	522	596
7. Gross rents, dividends, interest, and profits	137	127	131	143	156	176	207	235	260	292	322
Total	£482	£725	£744	£777	£855	£939	£1,037	£1,118	£1,207	£1,369	£1,534

(Per cent of total)

Expenditure	1938	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
1. On goods and services	64.1%	73.0%	72.7%	72.6%	73.5%	73.2%	70.6%	70.0%	69.7%	69.5%	69.1%
2. Interest	14.1	9.1	9.7	10.4	10.4	11.1	11.9	12.7	13.4	14.0	14.4
2a. To central government	*	3.0	3.9	4.8	5.4	6.2	7.3	7.7	8.1	8.2	7.7
3. Transfer payments	6.2	7.2	6.7	6.8	6.7	7.0	6.6	6.7	7.9	8.0	7.4
4. Current surplus (gross)	15.6	10.8	10.9	10.2	9.5	8.7	11.0	10.6	9.0	8.6	9.1
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Revenue											
5. Rates	44.0%	43.7%	43.8%	43.4%	42.6%	41.7%	41.8%	41.3%	39.6%	40.5%	40.2%
6. Current grants from central government	27.6	38.8	38.6	38.2	39.2	39.5	38.3	37.7	38.9	38.1	38.9
7. Gross rents, dividends, interest, and profits	28.4	17.6	17.6	18.4	18.2	18.7	20.0	21.0	21.5	21.3	21.0
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Not available.

Source: Central Statistical Office, *National Income and Expenditure, 1958* (London: HMSO, 1958), Tables 5 and 47.

with the national interest as expressed by Parliament.

2. Each Local Authority is assumed to behave in accordance with the local interest as expressed by the Local Council.

3. The national interest overrides local interests in the event of conflict.

The conclusion is obvious. Yet this must not be taken to mean that I adopt the second of the two extreme positions outlined above. For it may well be in the national interest, and almost certainly is, that sufficient local autonomy be preserved to sustain interest and participation in local government by conscientious and adequately equipped citizens. There may, for instance, be some national standardization in the provision of some service which would be desirable, *other things being equal,* but which might nevertheless have to be rejected as too costly (in a broad sense) because of the stifling of local initiative and incentive that such standardization entailed. There is, of course, plenty of scope for differences in judgment as to where the national interest really lies. *But it is in terms of the national interest that the issue is to be resolved,* and, for operational purposes, this will have to be taken to be whatever Parliament, in its wisdom, has decided. It would be foolish to deny that Government Departments sometimes deviate somewhat from the course Parliament intended them to pursue, and occasionally Parliament leaves them to choose their own course and only tells them what their destination is to be. But the same is true, *mutatis mutandis,* of local authorities and their councils.

On the basis of these political premises, the object of this study is to survey developments in local-government finance in England and Wales

since 1948, and to analyze the major policy issues that have arisen and their effects on practice. The plan of the study is as follows. Part I, Section II, will present the broad factual picture, in which certain salient features will be identified. Part II, Section III, in the next issue, will take up these features one by one and investigate them in greater detail. Section IV, the final section of the study, will draw together the threads of the argument and a general evaluation will be attempted. A bibliography of recent publications in this field is appended for reference purposes.

II. THE LOCAL-AUTHORITIES SECTOR AND THE NATIONAL ECONOMY [1]

The " local-authorities " sector of the British economy has been responsible for about $4\frac{1}{2}$ per cent of domestic expenditure on goods and services since the war (Line 2b of Table I). If only current expenditure on goods and services is considered (gross capital formation and inventory adjustment being ignored), the share of local authorities has been rising steadily (Table I A). It touched a low of just under 5 per cent in 1950, but by 1957 it had regained the 1938 level of 6 per cent. In view of the fact that the

[1] The financial data presented in this section relate to the whole of the United Kingdom, and not just to England and Wales, and are taken from the Central Statistical Office Blue Book, *National Income and Expenditure, 1958.* It should be noted that the Blue-Book figures differ somewhat from those given in the annual returns published by the various central departments specifically responsible for local-government financial affairs (i.e. *Local Government Financial Statistics, England and Wales, Local Financial Return* (Scotland), and, for Northern Ireland, the *Local Taxation Returns*). For a full discussion of these discrepancies see the Central Statistical Office, *National Income Statistics: Sources and Methods* (London: HMSO, 1956) Chapter IX, pp. 231-242. The differences arise mainly from adjusting these various returns (i) from a financial-year to a calendar-year basis, and (ii) from accruals to actual payments (the differences being treated as borrowing or lending). The picture here presented is not affected materially by these complications.

total amount of resources available has also been increasing (even in real terms) during this period, this suggests that local authorities' command over current real resources has not lagged behind the rate of growth of the economy as a whole.

The current account of the local-authorities sector shows that current expenditure on goods and services has tended to diminish somewhat in recent years relatively to other classes of local-authorities expenditure (Line 1, Table II), even though increasing somewhat in relation to all such expenditure in the economy as a whole. The main reason for this is the striking increase in payments of interest (Line 2) and especially interest payments to the central government (Line 2a). Just why this has taken place will be clear when we turn to the capital account.

On the revenue side of the current account, it will be noted that rates have declined during the decade from about 44 per cent of total revenues to about 40 per cent—a trend that we shall investigate in some detail in the next section. More striking than this, however, is the change that has occurred, by comparison with 1938, in the relative importance of other two revenue items—grants and property income. In 1938 current grants from the central government (Line 6) and gross property income (Line 7) were about equal. In the postwar period grants have risen to just under 40 per cent of total revenue and property income has fallen off to 21 per cent, despite a slow postwar rise in the latter due mainly to higher receipts (before charging interest or depreciation) from local-authority housing.

Current grants from the central government have been a remarkably stable component in local-authority revenues since the war, varying only about 1 per cent above or below 38½ per cent of the total. The explanation of the sudden increase in concern about the role of grants in the last few years is not, therefore, to be found in the actual trend of grants themselves, but, instead, in the increasing proportion of these grants that are earmarked for specific purposes (and made conditional upon certain actions by local authorities). Unallocated grants have fallen from around 25 per cent to around 17 per cent of total grants during this period (Line 1, Table III). The increase in specific grants is concentrated on social services (Line 2), and especially education (Line 2a).

Another aspect of this process is brought out in Table IV, where the proportion of each broad function financed by specific grants from the central government is shown, as are the aggregate amounts spent for these services. The dominant role of the social services (and especially education) is again noticeable (Lines 1 and 1a).

The local-authorities sector was, until 1953, responsible for about a quarter of total gross fixed capital formation in the economy, a share which has fallen off rather sharply in the last few years to but one-sixth by 1957 (Line 5, Table V). If we examine the capital account of the local authorities in more detail, we see that housing accounted for about two-thirds of its gross capital formation until about 1953 (Line 1, Table VI). Since then the share of housing has fallen off along with the local-authorities share in total gross capital formation. Moreover, although all housing as a proportion of all gross

TABLE III

CURRENT GRANTS TO LOCAL AUTHORITIES BY CENTRAL GOVERNMENT AT MARKET PRICES

(Amounts in millions)

Purpose of grants	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
1. Not allocated to specific services	£ 69	£ 59	£ 57	£ 62	£ 68	£ 72	£ 81	£ 83	£ 88	£105
2. For social services	167	186	199	227	253	268	286	325	370	425
2a. Education	149	166	174	199	222	237	254	291	335	387
3. For basic environmental services	33	34	35	39	43	50	48	54	57	59
4. Other	12	8	6	7	7	7	6	7	7	7
Total	£281	£287	£297	£335	£371	£397	£421	£469	£522	£596

(Per cent of total)

Purpose of grants	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
1. Not allocated to specific services	24.6%	20.6%	19.2%	18.5%	18.3%	18.1%	19.2%	17.7%	16.9%	17.6%
2. For social services	59.4	64.8	67.0	67.8	68.2	67.5	68.0	69.3	70.9	71.3
2a. Education	53.0	57.8	58.6	59.4	59.8	59.7	60.3	62.0	64.2	64.9
3. For basic environmental services	11.7	11.8	11.8	11.6	11.6	12.6	11.4	11.5	10.9	9.9
4. Other	4.3	2.8	2.0	2.1	1.9	1.8	1.4	1.5	1.3	1.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Central Statistical Office, *National Income and Expenditure, 1958* (London: HMSO, 1958), Table 47.

TABLE IV

CURRENT EXPENDITURE OF LOCAL AUTHORITIES BY BROAD CATEGORIES AND PROPORTION OF EACH CATEGORY
FINANCED BY SPECIFIC GRANTS

(Amounts in millions)

Function	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
1. Social services	£359	£354	£370	£420	£468	£496	£540	£601	£687	£769
1a. Education	250	273	288	330	367	389	430	479	550	624
2. Basic environmental services ...	154	167	175	189	208	225	236	252	278	299
3. All other expenditure (except interest and current surplus) ...	68	70	72	76	77	79	82	83	95	104

(Per cent of total)

Function	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
1. Social services	46.5%	52.5%	53.8%	54.0%	54.1%	54.0%	53.0%	54.1%	53.9%	55.3%
1a. Education	59.6	60.8	60.4	60.3	60.5	60.9	59.1	60.8	60.9	62.0
2. Basic environmental services ...	21.4	20.4	20.0	20.6	20.7	22.2	20.3	21.4	20.5	19.7
3. All other expenditure (except interest and current surplus) ...	17.6	11.4	8.3	9.2	9.1	8.9	7.3	8.4	7.4	6.7

Source: Central Statistical Office, *National Income and Expenditure, 1958* (London: HMSO, 1958), Table 47.

TABLE V

Gross Fixed Capital Formation by Sector at Market Prices

(Amounts in millions)

Sector	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
1. Persons	£ 232	£ 250	£ 260	£ 280	£ 319	£ 387	£ 485	£ 568	£ 596	£ 630
2. Companies	557	593	647	648	655	697	810	986	1,165	1,270
3. Public corporations	180	264	288	360	409	481	522	564	588	671
4. Central government	114	116	128	173	216	219	189	197	223	246
5. Local authorities	372	383	406	460	540	608	577	543	572	585
Total	£1,455	£1,606	£1,729	£1,921	£2,139	£2,392	£2,553	£2,858	£3,144	£3,402

(Per cent of total)

Sector	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
1. Persons	15.9%	15.6%	15.0%	14.6%	14.9%	16.2%	18.8%	19.9%	19.0%	18.5%
2. Companies	38.3	36.9	37.4	33.7	30.6	29.1	31.4	34.5	37.1	37.3
3. Public corporations	12.4	16.4	16.7	18.7	19.1	20.1	20.2	19.7	18.7	19.7
4. Central government	7.8	7.2	7.4	9.0	10.1	9.2	7.3	6.9	7.1	7.2
5. Local authorities	25.6	23.8	23.5	23.9	25.2	25.4	22.3	19.0	18.2	17.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Central Statistical Office, *National Income and Expenditure, 1958* (London: HMSO, 1958), Table 61.

TABLE VI

LOCAL AUTHORITIES' CAPITAL ACCOUNT AT MARKET PRICES

(Amounts in millions)

Gross fixed capital formation	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
1. Housing	£267	£263	£264	£288	£352	£399	£365	£318	£305	£297
2. Other social services	28	43	56	68	77	77	80	88	110	130
3. Basic environmental services	32	43	50	64	77	94	94	98	109	111
4. Trading services	37	23	20	19	17	20	20	19	24	26
5. Other	8	11	16	21	17	18	18	20	24	21
Total	£372	£383	£406	£460	£540	£608	£577	£543	£572	£585
6. Current surplus (gross)	£78	£81	£79	£81	£82	£114	£118	£109	£118	£139
7. Capital grants from central government	24	45	17	14	16	30	29	18	19	22
8. Net borrowing from central government	258	294	262	372	409	328	260	414	91	63
9. Other borrowing (net)	12	-37	48	-7	33	136	170	2	344	361
Total	£372	£383	£406	£460	£540	£608	£577	£543	£572	£585

(Per cent of total)

Gross fixed capital formation	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
1. Housing	71.8%	68.7%	65.1%	62.6%	65.2%	65.6%	63.3%	58.6%	53.3%	50.8%
2. Other social services	7.5	11.2	13.8	14.8	14.3	12.7	13.9	16.2	19.2	22.2
3. Basic environmental services	8.6	11.2	12.3	13.9	14.3	15.5	16.3	18.0	19.1	19.0
4. Trading services	9.9	6.0	4.9	4.1	3.2	3.3	3.5	3.5	4.2	4.4
5. Other	2.2	2.9	3.9	4.6	3.2	3.0	3.1	3.7	4.2	3.6
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
6. Current surplus (gross)	21.0%	21.1%	19.5%	17.6%	15.2%	18.8%	20.5%	20.1%	20.6%	23.8%
7. Capital grants from central government	6.5	11.7	4.2	3.0	3.0	4.9	5.0	3.3	3.3	3.8
8. Net borrowing from central government	69.4	76.8	64.5	80.9	75.7	53.9	45.1	76.2	15.9	10.8
9. Other borrowing (net)	3.2	-9.7	11.8	-1.5	6.1	22.4	29.5	0.4	60.1	61.7
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Central Statistical Office, *National Income and Expenditure, 1958* (London: HMSO, 1958), Table 48.

TABLE VI A

	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
1. Total gross fixed capital formation in housing	£337	£332	£331	£376	£494	£630	£644	£614	£626	£619
Per cent undertaken by local authorities	79.2%	79.2%	79.8%	76.6%	71.3%	63.3%	56.7%	51.8%	48.7%	48.0%
2. Total gross fixed capital formation in housing as per cent of all gross fixed capital formation	23.2	20.7	19.2	19.6	23.1	26.3	24.9	21.5	19.9	18.2
3. Total gross capital formation in other social services as per cent of all gross fixed capital formation	1.9	2.7	3.2	3.5	3.6	3.2	3.1	3.1	3.5	3.8
4. Total gross capital formation in basic environmental services as per cent of all gross fixed capital formation	2.2	2.7	2.9	3.3	3.6	3.9	3.6	3.4	3.5	3.3

capital formation rose from over 19 per cent in 1950 to over 26 per cent in 1953 before falling to 18 per cent in 1957 (Line 2, Table VI A), the local-authorities share in all housing has been declining continuously ever since 1950 (from nearly 80 per cent to under 50 per cent) (Line 1).

As housing has declined in importance in the local-authorities capital account, so "other social services" (mainly education) and "basic environmental services" (mainly water, sewerage and refuse disposal, roads and public lighting) have been increasing in relative importance, from about 8 per cent each in 1948 to about 20 per cent each in 1957 (Lines 2 and 3, Table VI). But when these expenditures are related to gross capital formation in the economy as a whole, the increase is much less striking (Lines 3 and 4, Table VI A).

The most spectacular change in the methods of financing this capital expenditure is that exhibited in borrowing both from the Central Government and elsewhere (Lines 8 and 9, Table VI). The dominant role of borrowing from the Central Government gave way at first erratically, but in recent years decidedly, to borrowing from other sources. Some light will be thrown upon this later when we consider the operations of the Public Works Loan Board.

Finally, a few words about the structure of the local-authorities sector itself. It is, of course, an amalgam of a multitude of individual decision-making units, each with distinctive objectives and operating in a distinctive way in a distinctive environment. Even if we consider only local authorities in England and Wales, there are well over a thousand authorities with taxing powers,

divided according to constitutional
status as below:

independent " general purpose " au-
thorities, but the non-county boroughs,

Type of local authority	Population		Rateable value	
	Amount (millions)	Per cent	Amount (millions)	Per cent
83 County boroughs	13.6	30.4%	177.3	29.5%
61 Administrative counties .... covering:	28.0	62.3	328.8	54.6
318 Non-county boroughs ⎱ ...... 563 Urban districts ⎰	19.1	42.6	246.3	40.9
474 Rural districts ª	8.9	19.7	82.5	13.7
London administrative county (City of London and London County Council covering 28 metropolitan boroughs)	3.3	7.2	95.7	15.9
Total: England and Wales	44.9	100.0%	601.9	100.0%

Source: Population figures from Registrar-General's Annual Estimate for 30 June 1957. Rate-
able values as at 1 April 1957 according to the Ministry of Housing and Local Government, *Return
of Rates and Rateable Values, 1957-58.*
   ª In rural districts there is, in fact, yet another substratum of some 10,000 further authorities
called parish councils or parish meetings.)

To attempt to characterize the main
economic features of each of these classes
of local authority is like trying to
enunciate the main principles governing
the structure of the English Language:
if one gets beyond assertions that are
always true but quite unhelpful (such
as " every sentence must contain a
verb "), an alleged generalization has
only to be stated for a host of miscel-
laneous exceptions to spring to mind.
Nonetheless, I will venture the view
that the county boroughs are the larger
urban areas, the non-county boroughs
and urban districts the smaller urban
areas, London is more or less London,
and the rural districts are (usually)
rural districts.[2] County boroughs are

   [2] But, for purposes of the record, let me quote
the following extracts from a pamphlet of the Cen-
tral Office of Information, *Local Government in
Britain* (London: HMSO, 1957, 3rd ed.):

   . . . Rural districts range from about 3 to
about 450 square miles (the majority extending
over between 80 and 160 square miles), and urban
districts and non-county boroughs from about 210
acres to ·about 80 square miles (the majority ex-

urban and rural districts, perform a
more restricted range of local-govern-
ment functions, the remainder being per-
formed by the administrative county of
which they are a part. The functions
that must or may be performed by the
constituent authorities vary with their

tending over between 2 and 10 square miles). . . .
Devonshire, covering some 2,611 square miles, is
the largest administrative county; the smallest is
the Soke of Peterborough, with a total area of
nearly 84 square miles.
   Population figures show an equal diversity. . . .
Analogous figures are: over 62,000 to under 1,500
in rural districts; over 110,000 to under 770 in
urban districts; and over 184,000 to under 1,000
in non-county boroughs. The population figures
in fifty-four of the county boroughs fall between
50,000 and 150,000; but in eighteen cases, they
have risen to between 150,000 and 300,000, and
in nine cases, they reach over 300,000—the city
of Birmingham having a population of over one
million people. At the other end of the scale,
there are two county boroughs with populations of
less than 50,000. Middlesex is the most populous
administrative county, with a population of over
2,270,000; Rutlandshire with a population of less
than 21,000, is the least populous. (p. 5)

   The amount of overlap in the economic character-
istics of these classes of local government is obvious,
and will become more so when we come to consider
their fiscal resources.

constitutional status. The county boroughs each levy their own rates, and each administrative county levies for general purposes a uniform rate (the county precept) upon all ratepayers in its constituent authorities, while each of these authorities in its turn levies an additional rate for its own purposes. The structure of local government in England and Wales is thus rich in its diversity, or rife with confusion, according to one's viewpoint.[3] It is from this aspect of our subject matter that the importance of equalizing grants derives.

[3] For an excellent diagnosis of the problems of local government written from the latter viewpoint, see the 1947 Report of the Local Government Boundary Commission. A major surgical operation was recommended for which no one in authority could be found to take responsibility. So the consultants were dismissed and the patient suffers on.

III. THE MAJOR ISSUES

From the foregoing survey we may isolate the following main topics for more detailed consideration:

(1) Is it practicable and desirable to increase the relative share of rates in the revenues of local authorities?

(2) Is it practicable and desirable to find some new sources of local revenue?

(3) Is it practicable and desirable to change the present balance between general and specific grants?

(4) Is it practicable and desirable to use grants to equalize the fiscal resources of local authorities?

(5) Is it practicable and desirable to regulate local authorities' capital expenditure by controlling their access to outside funds?

In Part II of this study each of these questions will be taken up in turn.

SCIENTIFIC APPRAISAL

EDWARD F. RENSHAW *

I. *Introduction*

WHILE interest in property-tax reform has increased in recent years owing to an increase in state aid and a concern for equalization, assessment practices have long been the subject of criticism. During the last half century a number of scattered individuals, working independently and motivated by different reasons, have shown an interest in what has sometimes been called "scientific" appraisal, the application of statistical techniques to problems of property valuation. A purpose of this paper will be to draw together and preserve bits of knowledge that have been discovered by these individuals and published in obscure places. But more than that, the aim is to point out the trend that has taken place in this direction and suggest ways in which we might facilitate research in a promising area for further economic and social analysis.

A further purpose of this paper is to draw together information that might enable those in charge of allocating research funds to better judge the desirability of increasing research in the area of real-estate analysis. While millions of dollars are spent each year to appraise real property, little has been spent in recent years to improve upon what is known as the three basic approaches to real estate appraisal: the cost approach, the income approach and the market-data approach. Expenditures for what

might be regarded as fundamental research are almost negligible. Yet the few studies that have been made indicate that the return or pay-off from undertaking fundamental research in this area may be high.

In the three parts of this paper which follow an attempt will be made to (1) summarize work that has been done, (2) present a case for developing the econometric method of real-estate appraisal, and (3) to discuss what would be involved in a program to develop and apply the method.

II. *A Summary of the Work That Has Been Done*

1. During the 1920s and early 30s, several studies were made of the complex factors affecting land values, two of which are summarized below.[1]

(a) In an endeavor to demonstrate the applicability of statistical methods to problems of rural real-estate assessment, Haas made an intensive study of 160 farms that were actually sold during the four year period, 1916 to 1919, in Blue Earth County, Minnesota.[2] After

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[1] In addition to studies cited later, these were Mordecai, Ezekiel, "Factors Affecting Farmers' Earnings in Southeastern Pennsylvania," *United States Department of Agriculture Bulletin* 1400, April, 1926; E. H. Wieking, "Factors Determining the Value of Farm Real Estate in the United States," *Proceedings of the Second International Conference of Agricultural Economists, 1930*; J. L. Tennant, "The Relationships between Roads and Agriculture in New York," *Agricultural Experiment Station Bulletin* 479 (Ithica, New York: Cornell University, May 1929).

[2] G. C. Haas, "Assessment of Farm Real Estate," *Proceedings of the Sixteenth Annual Conference on*

correcting the sales data for class I town influence, secular price increases, and state-road influence, he obtained the following relationship between adjusted sales value per acre and four independent variables:

$$X_1 = 57.785 + 1.067X_2 + .728X_3 + .166X_4 - 3.422X_5;$$

where

X_1 = value per acre corrected as previously explained,

X_2 = 1919 depreciated cost of buildings per acre,

X_3 = land-classification index,

X_4 = Productivity-of-soil index, a relative figure based on average yields of the principal crops grown in Blue Earth County, and

X_5 = distance to market.

The coefficient of multiple correlation between these five variables was .81. Sales price estimated by means of this equation involved a probable error of 9.55 per cent of average sale price, or $15 per acre. Comparing the results with existing assessed valuations, Haas pointed out:

> The assessed valuations of the 160 farms covered in the survey have the amazing probable error of 26.7 per cent of the average sale value, or $33 per acre, compared with the probable error of 9.55 per cent of the average sale value, or $15 per acre, in the results obtained in this survey. A probable error of 26.7 per cent means substantially that half the assessed valuations are more than $33 per acre above or below the sales price. If nothing more had been done than to apply the average sales price, $157.23 per acre, uniformly to all farms, the probable error would have been only 16.4 per cent, or $25.76 per acre.[3]

After suggesting ways in which the relationship might be improved, he concluded:

> It is not unreasonable to believe, however, that the probable error can be reduced under 5 per cent, perhaps under 3 per cent, in areas where the land is as uniform as in Blue Earth County.[4]

(b) Wallace's interest in comparative farm-land values grew out of a desire to improve the appraisal techniques of insurance companies, Federal Land banks, and other mortgage lenders.[5] Using Census data on Iowa land values by counties in 1925, he obtained the following relationship for 99 observations:

$$X_1 = -74.7 + 3.4X_2 + 1.8X_3 + .6X_4 + .6X_5;$$

where

X_1 = land value per acre (without buildings), 1925 Federal Census,

X_2 = ten-year average corn yield per acre,

X_3 = percentage of land in corn,

X_4 = percentage of land in small grain, and

X_5 = percentage of land not plowable.

The multiple-correlation coefficient obtained in this relation was .9166.

2. More recently a number of other studies have been made.[6]

(a) In 1945, Selby endeavored to predict irrigated land values.[7] He had constructed an "index of crop intensity"

[4] *Loc. cit.*

[5] Henry A. Wallace, "Comparative Farm-Land Values in Iowa," *Journal of Land and Public Utility Economics*, II (1926), pp. 385-92.

[6] Reference should be made to one in 1937 by Merril M. Flood, "Scientific Assessment Procedure," *Princeton Local Government Survey* (Supporting Memorandum No. III (D) to accompany Pocket Report Series No. III: "Readjusting Local Services and Areas"), 1937.

[7] H. E. Selby, "Factors Affecting the Value of Land and Water in Irrigated Land," *Journal of Land and Public Utility Economics*, XXI (August, 1945), p. 250.

Taxation (New York: National Tax Association, 1924), pp. 63-114.

[3] *Ibid.*, p. 79.

by arbitrarily assigning the weight of 1.00 to the percentage of land in orchards, vineyards, planted nuts, and vegetables, the weight of .50 to semi-intensive crops such as sugar beets, cotton, potatoes and beans, and the weight of zero to all other irrigated acreage. No theoretical justification was given for the weights chosen. The index, however, yielded a remarkable coefficient of gross correlation (.785) when correlated with adjusted 1940 Census estimates of the value of irrigated land without buildings in 199 counties.

By adding alfalfa yield, farm size, and the cost of water, Selby obtained a multiple-correlation coefficient of .826. The cost of water had the wrong sign (+), perhaps because he used total cost per acre per year, which may have turned the variable into a productivity index of sorts, assuming not too great a variance in per unit cost of water.

(b) In 1954 the Canadian Department of Agriculture published a study by Warren on factors associated with land values in the proposed South Saskatchewan River Development.[8] It was hoped that the findings of this study could be used as a guide to governmental policy and to development agencies in setting a fair price for land to be condemned or transferred as a result of irrigation. Out of some 24 possible variables, two dependent variables and four independent variables were selected for multiple correlation with the use of multiple-factor analysis.[9] Bare land value, first excluding nonarable acres and then including nonarable acres, was corre-

lated both over time and cross-sectionally with the following independent variables:

X_{20} = index of commodities and services used by farmers and family living—Western Canada,

X_{10} = soils index,

X_{22} = average yield of wheat 5 years previous to the purchase of the parcel, and

X_{23} = year of purchase—trend factor.

The multiple-correlation coefficients obtained by Warren ranged from a low of .4646 to a high of .8837 where yearly averages were used for observations.

(c) Recently, in an attempt to formulate a better procedure for appraising reclamation investment, I have developed and tested an "acreage distribution hypothesis".[10]

To the extent that the underlying factors governing productivity, such as the type of soil, climate, topography, distance from markets, local demand, water rights, and the expected cost of water, are directly related to, or impose restraints on, a rational cropping pattern, many variables influencing land value can be collapsed into statistics on the acreage devoted to various crops.[11]

The relationship found was: [12]

$$X_1 = 101 + .459X_2 + 2.611X_3 + 10.41X_4;$$
$$(1.01)\quad (1.32)\quad\quad (.92)$$

where

X_1 = value of irrigated land, 37 irri-

[8] D. M. Warren, A Study of Factors Associated With Land Values in the Proposed South Saskatchewan River Development (Ottawa: Canada Department of Agriculture, December 1954).

[9] Thurstone, L. L., Multiple-Factor Analysis (Chicago: University of Chicago Press, 1947).

[10] Edward F. Renshaw, " Cross-Sectional Pricing in the Market for Irrigated Land," Agricultural Economics Research, January 1958, pp. 14-19; Toward Responsible Government (Chicago: Idyia Press, 1957), 1957), Chapter XIII, and Appendix B.

[11] Ibid., pp. 142-43.

[12] The multiple-correlation coefficient squared was .88. The figures in brackets are the standard errors of the corresponding coefficients. Note that those for X_2 and X_3 are not significantly different from zero.

gation enterprise organizations, 1946 (all enterprises having a substantial acreage of cotton and citrus, excluded),

X_2 = the per cent of total acreage irrigated devoted to cereals,

X_3 = the per cent of total acreage irrigated devoted to seeds, miscellaneous, and to vegetables and truck, and

X_4 = the per cent of total acreage irrigated devoted to fruits and nuts.

(d) Some work has been done to extend the statistical approach to land appraisal beyond agriculture. One case can be cited where it is known that statistical methods were employed to assess forest land.

In the town of Louden (New Hampshire) the appraised values of the land, exclusive of buildings, were computed by means of a statistical formula. This formula took into account the principal factors affecting value and was based on values of 134 individual properties, as determined by one of the same expert appraisers who was responsible for the individual appraisals in Freemont and Richmond. . . . [13]

The equation used in the assessment was of the form:

$$X_0 = b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 (1.04)^n X_4;$$

where

X_0 = value per acre of total area,

X_1 = volume of merchantable timber per acre of total area,

$X_2 = X_1^2$,

X_3 = ratio of area in crop land to total area plus 0.45 times ratio of area in pasture to total area, and

X_4 = ratio of area in forest to total area.

[13] Fred Rogers Fairchild & Associates, *Forest Taxation in the United States* (Washington: Government Printing Office, 1935), p. 112.

The introduction of $(1.04)^n$ implies that the unmerchantable timber increases in value by 4 per cent of the total value of land and timber each year, an assumption which was checked by inspection of the appraisals. It was found, however, that a slight alteration of timber values would improve the accuracy of the formula. When the residuals from the unaltered formula were plotted against timber volume per acre, the freehand curve drawn indicated that the low and high volumes per acre were overappraised and those in the middle range were underappraised.[14]

3. Growth in both the amount of state aid and the proportion of it that is distributed according to some principle of "equalization" has encouraged a number of prominent educators to seek a better index of taxpaying ability than is obtained from local assessments. Usually attention is focused on ways of improving local procedures or on ways of adjusting assessments in each district for the average degree of underassessment relative to sales value. In a few states, however, indices of relative taxpaying ability have been accepted for purposes of distributing state aid. The indices are typically constructed by correlating various published statistics of an economic character with some reliable measure of aggregate property value. Factors such as retail sales, proceeds from passenger-automobile-license sales, personal-income-tax returns, value of farm products, the number of gainfully employed nonfarm, nongovernment workers, and the per cent of public utilities, are commonly included in the models used to determine local taxpaying ability.[15]

[14] *Loc. cit.*

[15] For a discussion of what has been done in this area, see R. L. Johns and Herbert A. Meyer, "Distributing State Funds, How to estimate taxpaying

While the notion of taxpaying ability can easily be confused with sources of income other than property, most of the indices actually constructed have striven to predict property values and as such should properly be considered appraisal models. The only real barrier to their practical application to problems of assessment and appraisal within districts is the amount of aggregation implicit in their construction. Different kinds and amounts of property are lumped together in such a way that it might be difficult to adapt the models so they could be used to appraise individual pieces of property.

4. To the best of this author's knowledge, no attempt has been made to construct formal appraisal models for the urban real-estate market. Correlations known to exist, however, suggest that this area is a promising field for further analysis. Muth recently obtained a significant correlation over time between the price of housing and various determining variables on both the demand and the supply side.[16] For the period 1915 through 1941, three variables included in Muth's demand equation—income, the rate of interest, and the quantity of construction—can be said to explain about 90 per cent of the variation in price.[17] For the shorter period, 1915-34, four variables on the supply side—total new construction, an index of building-material prices, the relative wage of unskilled construction workers, and the ratio of wages of skilled

to unskilled construction workers—explained about 80 per cent of the variation in price of housing.[18]

The Muth analysis indicates that we can confidently develop models which satisfactorily explain changes in the price of residential housing over time. An examination of data from the 1950 Census of Housing on the median value of owner-occupied, nonfarm, single-dwelling detached structures, by states, further suggests that we can confidently predict variations in the value of housing cross-sectionally. Simple correlations (with r^2 ranging from .70 down to a low of .17) are found between the Census' estimate of housing value and the following variables: per capita income payments in 1949 by states, the percentage of dwelling units in detached one-unit structures, the ratio of rural to urban population in 1950, population per square mile in 1950, and the per cent of dwelling units occupied by nonwhites. The latter four variables are to some extent proxies for income. They could be included in the model to improve upon or correct per capita income payments, which do not constitute a good measure of the income of nonfarm home owners, owing to the existence of imperfections in the labor market such as rural-urban and white-nonwhite income differentials.

If we can explain differences in the median value of housing from place to place and perhaps differences in the distribution of housing value around the median,[19] the problem remaining is to

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ability of local school units," *The Nation's Schools*, 49 (February 1952), 49-50.

[16] Richard F. Muth, *The Demand For Non-Farm Housing* (Chicago: Unpublished Ph.D. dissertation, Department of Economics, University of Chicago, 1957), pp. 79-80.

[17] Price was approximated by an index of construction costs believed to be a relevant measure of it.

[18] *Ibid.*, p. 146.

[19] In addition to presenting estimates of the median value of owner occupied dwelling units, the Census gives the distributions from which the medians were obtained. If upon analysis, parameters measuring relative dispersion around the medians are found to vary from distribution to distribution, it may be possible to explain functionally the variance in variances.

find ways of attaching the appropriate distribution of housing value, at a given place, to actual property. In this connection, various theories of the arrangement of activities in a community as they pertain to land use might be of assistance.[20] Essentially all that is required for assessment, given the appropriate distribution of aggregate property value, is a means of ranking individual properties in order of relative value.

The bold and perhaps heroic approach that has been presented in this section may not represent the most fruitful approach to finding suitable models with which to appraise individual parcels of urban real estate since the conclusions necessarily rest on aggregate relationships. However, the fact that aggregative relationships do exist points to a possibility that models developed in one place for the appraisal of a specific kind of urban real estate may have far more general applicability. Herein lies the real promise of an empirical theory of the urban real-estate market.

III. *The Case for an Econometric Approach to Real-Estate Appraisal*

The theory underlying the econometric approach to real-estate appraisal can be briefly stated as follows: While it may be hopeless to isolate all of the factors which buyers take into consideration when purchasing property, it is possible to establish a correlation between real-estate values and a select subset of " determining " variables $X_1, \ldots X_n$, or possibly other variables dependent on some or all of the X's.[21] Although the choice

of the function and its mathematical form is somewhat arbitrary, it is not necessary to choose the best possible function, but only one which predicts real-estate values with sufficient accuracy, in a statistical sense, for the type of appraisal under consideration. The unexplained variance provides a basis for testing the success or failure of the forecasting function; it can be compared with the variance associated with other methods of appraisal and thus furnish a basis for estimating the relative efficiency of different appraisal methods.[22]

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tion that is necessary to predict real-estate values by means of functional relationships, it may be both desirable and necessary to introduce " proxy " variables for the real factors thought to determine property values. The " crop-value " index approach developed in my study, *Toward Responsible Government*, pp. 138-43, is illustrative of a case in which cropping pattern can be substituted for measures of agricultural income which are more difficult to obtain as well as less reliable. In choosing the form and selecting the variables to include in an assessment model, for instance, the following standards ought to be borne in mind:

1. All variables should be objective; the data pertaining to them should be obtainable from reliable sources.
2. Both the form of the equation and the measurement of the variables included should be determined independently of individuals whose property is being assessed.
3. Each independent variable should represent directly or indirectly an important value dimension; a sufficient number of variables should be included in order to represent all of the principle dimensions of property value.
4. The dependent variable should correspond closely to actual sales value.
5. The equation employed should be as sensitive to low valued property as to high.
6. The equation should yield a high correlation and be theoretically plausible, without undue complexity that would make the formula administratively unfeasible.

22 If the appraisal purpose is to predict sales value, a straight-forward comparison of statistical variance is warranted. If the appraisal purpose is to establish an assessed valuation on which to base property taxes, a functional estimate may be superior to appraisal methods which yield a lower probable error, for reasons that will shortly be enumerated.

20 For a list of references on the arrangement of activities, see: E. M. Fisher and R. M. Fisher, *Urban Real Estate* (New York: Henry Holt and Company, 1954), pp. 309-14.

21 Where there is danger of underreporting, falsification of records, or a refusal to disclose the informa-

Perhaps the most important area of application for the econometric method of appraisal is in the field of assessment. It is common knowledge that property-tax assessment is often carried out in a manner that does not insure a fair valuation of all property. Some studies of property assessment relative to sales value have even indicated that assessment could be improved, from the standpoint of increasing equality of treatment, by assigning to all property within the taxing district the average sales value of property sold; [23] since the latter system is tantamount to making no appraisal of the individual properties concerned, it is immediately apparent that a model of the real-estate market which explained only a small fraction of the variance in sales values would be an improvement over the actual assessment procedure followed in some districts.

The econometric approach to real-estate assessment, almost by definition, assures equal treatment. He who pays taxes based on the approach can easily ascertain that he is being treated impartially, even though he may feel that he is being treated unfairly by a model not always accurate in its predictions of sale value. Moreover, some averaging may encourage putting real estate in its highest and best alternative use.

In addition to leaving out of the assessment model minor variables which would have the effect of inhibiting investment, a case can be made for exempting those variables which are peculiar to individual transactions. To sum up, part of the unexplained variance associated with empirical models of the real-estate market can be justified on grounds that it is caused by variables that should be excluded from the model for policy purposes anyway.

[23] Haas, op. cit., p. 79.

Further advantages can be cited for the econometric approach when the issue is interdistrict equalization. The popular assessment-sales ratio method of determining equalization factors is fraught with the difficulty that the sample of properties sold may be unrepresentative of average assessment practice.[24] The problem of sampling error is particularly acute when certain classes of property are sold infrequently. These difficulties are largely avoided by the econometric approach, since sales observations used to validate the assessment model can be taken from all districts which are statistically comparable. Further, where functional relationships are known to exist, the sales observations actually used may not have to be representative of either average property value or average assessment practice to obtain a good fit.

IV. *Towards a Developmental Program*

The obstacles to the development and application of a " scientific " approach to real-estate appraisal are of three kinds: (1) lack of suitable data, (2) hostility on the part of the appraisal profession, and (3) lack of financial support.

1. Lack of suitable data. The progress which has been made in applying statistical techniques to problems of farm real-estate appraisal might well be attributed to the relative abundance of coordinated data on agricultural-land values and the factors which determine value. In 1954, Fisher noted that research in urban real estate has been handicapped by the lack of useful data.

Until recently, there had never been a complete nation-wide census of any type of real estate. The Census of Housing in

[24] U. S. Department of Commerce, Bureau of the Census, *Assessed Values and Sales Prices of Transferred Real Property*, (Washington: Government Printing Office, G-CGA-No. 7 May 5, 1958), pp. 1-8.

1940, the first of its kind in the United States, helped to remedy the deficiency. This and the subsequent Census of Housing of 1950 have added greatly to the stockpile of urban real estate data.

Yet, today more facts are known about a single agricultural product like peanuts than about urban real estate. Every year since 1916 acceptable estimates have been made of the quantity of peanuts produced, consumed, exported, imported, and held over to another crop year. But a comprehensive census of urban real estate still has to be taken. Only crude estimates exist about changes in the inventory from period to period. No nation-wide information is available on the average life of various kinds of buildings, or even on the intensity with which they are used.[25]

Before substantial progress can be made in the area of urban appraisal, resources will have to be used either (a) to collect the required data from scratch, (b) pull together and coordinate scattered bits of information that have been collected by appraisers, assessors, and state tax commissions, or (c) revise and correlate the relevant survey data obtained by the Census of Housing and the Census of Governments.[26] The most economical approach to the systematic development of models of the urban real-estate market would probably be to employ a judicious combination of these methods of acquiring requisite information.[27]

25 Fisher and Fisher, *op. cit.*, p. 5.

26 The Census of Governments in *Assessed Values and Sales Prices of Transferred Real Property* has recently made an extensive investigation of real-estate sales in the United States in an endeavor to determine the extent to which various types of real estate in various parts of the country are underassessed.

27 The problem of what information should be collected and how to best go about collecting it, merits further investigation. By way of suggesting a range of factors that might be included in appraisal models see: W. L. Prouty, C. W. Collins and F. H. Prouty, *Appraisers and Assessors Manual* (New York:

2. Professional hostility. In commenting on the work of Haas and Flood in 1940, the National Association of Assessing Officers had the following to say:

> The problem of determining the weights to assign to particular value-determining factors involved the use of complicated statistical techniques, and the whole process was thought by some to be utterly visionary.[28]

It is understandable that many assessors and appraisers are skeptical and even hostile to complicated statistical methods for estimating real-estate values. The acceptance of these methods by certain state legislatures for purposes of apportioning state aid to education suggests, however, that we are trending in the direction of a more formal analysis of the real-estate market.[29] It is likely that growing awareness of the inequality in existing assessment procedures will bring about sweeping changes and result in increasing supervision of assessment procedures by state tax commissions. Since the maintenance and development of efficient appraisal models will probably require a larger, more centralized, administrative unit than the typical assessment district, the logical thing to do would be to assign these responsibilities

McGraw-Hill Book Company, Inc., 1930). Beginning on page 287 are tabled seventy-nine factors together with the probable influence of each as an asset or a liability on various improved properties. Needless to say considerable imagination and ingenuity will be required before many of these factors can be quantified in statistical models. One aspect of the program to develop assessment models will be systematically to eliminate the less important factors —those variables that need not be included in the model to obtain reasonable estimates.

28 *Urban Land Appraisal* (Chicago: National Association of Assessing Officers, 1940), pp. 40-41.

29 As of 1952, Alabama, Florida, Georgia, West Virginia, Arkansas, and Texas were using statistical indices of taxpaying ability in apportioning state aid to education.

to state, metropolitan, and possibly even national agencies. Local assessment units would then be made responsible for collecting the requisite information about property existing in their jurisdiction and calculating assessments according to formulas developed by these agencies. The reorganization suggested here is not revolutionary; in the state of Illinois, for instance, the state tax commission has already been assigned the responsibility of issuing detailed assessment procedures to local assessors.[30] Essentially all that is being advocated beyond the continuation of existing trends is that the voluminous and detailed instructions of the state tax commission be collapsed into simple, unambiguous assessment formulas.

3. Lack of financial support. Some of the larger appraisal firms, such as Real Estate Research Corporation, could probably justify investing considerable

[30] *Illinois Real Estate Appraisal Manual* (Chicago: Illinois Tax Commission). The manual contains forms, instructions, procedures, and guides for the valuation of land, the estimation of reproduction cost of improvements, the determination of allowances for depreciation and obsolescence, and the establishment of the fair value of improved and unimproved properties for assessment purposes. Definite guides and tables are presented for the valuation of all classes of rural and urban property.

sums of money to develop more sophisticated and impressive appraisal tools. It may, however, be in the best interest of the public to have the basic research necessary to the development of operational appraisal models supported by public or nonprofit organizations. All important discoveries would then automatically become public property, available to anyone interested in improving appraisals.

Progress will undoubtedly continue to be made in this area even though nothing is done to promote the interest and research of curious and scattered individuals. It seems reasonable to suppose, however, that progress could be greatly accelerated by creating an institute for the advancement of appraisal methods. Preferably the institute should be located in or near some large university and be supported by various groups interested in improving appraisal techniques. The function of the institute should be to coordinate the collection of necessary data, to promote both directly and indirectly analysis of the data collected, and to make generally available to all interested parties information as to the results and efforts pending in this field of research.

ON THE BURDEN OF THE CORPORATE-INCOME TAX †

CHARLES E. MARBERRY *

THE corporate-income tax is the second most important source of federal tax revenue; nevertheless, important questions of tax policy cannot be rationally resolved because of uncertainty about its incidence.[1] This paper will examine several important considerations which will affect the burden of the corporate-income tax. No attempt is made in this paper to develop a theory of the incidence of *a* corporate-income tax. Here, the analysis is concerned with the burden of *the* corporate-income tax following the Second World War.

Corporate managers, in attempting to earn profits for stockholders, make decisions which will significantly influence the burden of the corporate-income tax.[2]

The decisions which will importantly affect the ultimate burden of the tax are (a) decisions on methods of financing, (b) short-run decisions on output and prices, and (c) long-run decisions on investment.[3] If those corporations which " pay " (or " collect ") the corporate-income tax do consider the tax as a cost in their price, output, and investment decisions, and if they are able effectively to treat the tax as a cost, then the burden of the tax is shifted from the stockholders.[4] This paper will examine the three premises involved in the above statement: (1) the intention of corporations to treat the tax as a cost, (2) their ability to treat the tax as a cost, and (3) the extent to which corporate-income-tax revenues are obtained from firms which attempt and are able to treat the tax as a cost.

[1] For a survey and analysis of recent literature on corporate-income-tax incidence, see B. U. Ratchford and P. B. Han, " The Burden of the Corporate Income Tax," *National Tax Journal* Vol. X (December, 1957) pp. 310-24.

[2] This paper has intentionally avoided reference to profit maximization. There is much evidence that the introductory, textbook concept of profit maximization does not motivate the decisions of the managers of many large corporations. Gordon, for example, states: ". . . I suspect that ' satisfactory profits,' vague as that criterion is, is frequently a more accurate description of the primary objective than ' maximum profits.' This is particularly likely to be true of mature, successful firms." R. A. Gordon, " Short-Period Price Determination in Theory and Practice," *American Economic Review*, XXXVIII (June, 1948) p. 271. See, also Herrymon Maurer, *Great Enterprise* (New York: MacMillan, 1955) Chapter 6.

If a broader concept of " profit " maximization is employed by the reader—one to include the optimum (" maximum ") balancing of all planned and necessary goals — then this paper would accept profit maximization as the goal of corporate enterprise.

[3] Ratchford and Han write: " The most important responses to tax changes are to be found in investment decisions, which are made on the basis of expected returns, and those decisions, in turn, are a major factor in determining whether the tax can be shifted." *Op. cit.*, pp. 322-23.

[4] Two empirical studies found that the long-run rate of return on investment, after taxes, had not been significantly influenced by the corporate-income tax. Eugene M. Lerner and Eldon S. Hendriksen, " Federal Taxes on Corporate Income and the Rate of Return on Investment in Manufacturing, 1927 to 1952," *National Tax Journal*, IX (September, 1956), pp. 193-202, and John C. Clendenin, " Effect of Corporate Income Taxes on Corporate Earnings," *Taxes*, Vol. 34 (June, 1956), pp. 391-98.

Sources of Corporate-Income-Tax Revenues

Looking first at the sources of corporate-income-tax revenues (Table I), we find that taxes on the incomes of manufacturing corporations have produced almost 60 per cent of the total corporate-tax collections for the period 1946 through 1955. The percentage attributable to manufacturing corporations has varied from 52.1 per cent in 1946 to 64.1 per cent in 1951. Since this industrial classification has been significantly the most important source of corporate-income-tax revenues, this paper will be concerned principally with considerations affecting the burden of the taxes levied on the incomes of manufacturing corporations.

Now, turning to an examination of corporate-income-tax collections as distributed by the size of manufacturing firms (Table II), it is seen that corporations with less than $1 million in assets are a relatively unimportant source of revenue, constituting less than 8 per cent of the total for the period 1946 through 1955, and even less in the most recent years. As would be expected, the major source of revenue from taxes levied on the incomes of manufacturing corporations are the collections obtained from the size class of corporations with $100 million and more of assets. The percentage obtained from the largest size class varied from 19.4 per cent in 1946, at which time the large corporations were still involved in postwar readjustment problems, to 57.4 per cent in 1955. Total corporate-income taxes collected from manufacturing corporations for the period 1946 through 1955 were obtained 46.9 per cent from corporations with $100 million and more of assets. In 1954 and 1955, when data in *Statis-*

tics of Income were grouped in 14 size classes, the largest corporations (91 firms in 1954 and 97 in 1955) with $250 million and more of assets accounted for 44.2 per cent of total corporate-income taxes of manufacturing corporations. As a consequence of their quantitative importance, the actions of the large manufacturing corporations will weigh heavily in determining the burden of the corporate-income tax.

Considerations Affecting the Intention and Ability of Corporations to Shift the Tax

Intention to Shift the Tax. This author has not attempted the often unrewarding task of surveying, by questionnaire, corporate practices in order to discover the intentions of corporate managers in their treatment of the tax.[5] The authoritative American Institute of Accountants has taken the position that: "Income taxes are an expense that should be allocated, when necessary and practicable, to income and other accounts, as other expenses are allocated. . . . The difficulties encountered in allocation of the tax are not greater than those met with in many other allocations of expenses."[6] In this view, then, the in-

[5] A survey of business opinion in the 1920's concluded that ". . . there is little effective agreement among business men except in the opinion that the tax is not shifted, and in the fact that no effort is made to do so." National Industrial Conference Board, *The Shifting and Effects of the Federal Corporation Income Tax* (New York, 1928), p. 157.

In 1948, a survey of business views found that about 60 per cent of 209 respondent companies stated that corporate-income taxes did influence pricing policies and 55 per cent of the 211 respondent corporations indicated "that the corporate income tax had influenced decisions relating to expansion." Lewis H. Kimmel, *Taxes and Economic Incentives* (Washington, D. C.: Brookings Institution, 1950), pp. 27 and 34.

[6] American Institute of Accountants, Committee on Accounting Procedure, *Accounting Research Bulletin No. 43* (1953), p. 88.

TABLE I

CORPORATE-INCOME TAX [1] BY MAJOR INDUSTRIAL CLASSES

PERCENTAGE DISTRIBUTION FOR TAX YEARS [2] 1946-1955

Industrial classes	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	Total 1946-55
Total collections, all classes (Millions of dollars)	$8,875	$10,981	$11,920	$9,817	$17,317	$22,082	$19,148	$19,869	$16,861	$21,741	$158,611
Manufacturing	52.1%	57.5%	57.2%	56.0%	61.4%	64.1%	59.7%	61.2%	56.2%	59.9%	59.4%
Trade	22.9	20.2	17.9	15.2	15.1	12.6	11.8	10.4	11.2	11.3	13.8
Public Utilities	10.1	9.2	10.1	10.8	10.2	10.4	13.0	12.8	13.7	13.4	11.7
Finance, Insurance, Real Estate, etc.	8.3	5.9	6.8	10.3	7.3	7.0	9.2	9.6	12.4	9.5	8.7
Mining and Quarrying	1.5	2.7	3.5	2.7	2.6	2.5	2.6	2.6	2.5	2.8	2.6
Services	3.3	2.4	2.1	2.3	1.4	1.5	1.7	1.6	1.9	1.7	1.9
Construction	0.9	1.3	1.8	2.0	1.4	1.3	1.6	1.4	1.5	1.2	1.4
Agriculture, Forestry, and Fishing	0.8	0.7	0.7	0.7	0.6	0.5	0.4	0.4	0.4	0.3	0.5
Not allocable	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: Percentages may not add to 100.0 because of rounding.

[1] Data also include excess-profits-tax collections for periods when excess-profits tax was in force.

[2] A "tax year" includes returns for the calendar year ending December 31 of the respective year, plus fiscal years ending within the period July of the respective year through June of the following year, and any part year with the greater portion of the accounting period falling in the respective year.

Source: Computed from U. S. Treasury Department, Internal Revenue Service, *Statistics of Income*, Part 2, relevant years.

come tax is an expense of a company's having operated at a profit.

The important consideration is not whether corporations try to treat the tax as an expense but whether they are able to treat the tax as such. Corporations, as other private businesses, are operated primarily to earn profits for the owners and not to collect taxes for the government; corporate-income taxes are merely a result of a company's hav-

of capital who have loaned their capital to the business—is deducted before arriving at taxable corporate income. As a consequence of the nature of the tax, there are two adjustments which corporate managers can make in order to preserve, after taxes, the planned rate of return on stockholders' investment: (1) obtain a greater dollar volume of sales from existing facilities in the short run and add facilities in the long run only

TABLE II

CORPORATE-INCOME TAXES[1] OF MANUFACTURING CORPORATIONS

PERCENTAGE DISTRIBUTION BY ASSET SIZE OF FIRMS FOR TAX YEARS[2] 1946-1955

Size classes *	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	Total 1946-55	Total 1954-55
$ 1 } 25,000 }	0.5%	0.3%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.0% 0.1	0.0% 0.1	0.2%	0.0% 0.1
50,000	1.0	0.6	0.4	0.4	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.2
100,000	3.8	2.3	1.7	1.6	1.1	1.0	1.1	0.9	1.0	0.9	1.3	0.9
250,000	5.7	3.7	2.9	2.6	1.9	1.7	1.8	1.5	1.6	1.4	2.1	1.5
500,000	8.1	5.7	4.3	3.8	3.3	2.9	3.1	2.5	2.7	2.5	3.5	2.6
1,000,000 } 2,500,000 }	23.0	18.8	14.8	13.2	12.3	11.5	11.7	9.8	5.3 5.2	5.0 4.7	12.4	5.1 4.9
5,000,000	11.0	10.0	8.7	7.3	6.7	6.4	6.9	5.9	5.8	5.0	6.9	5.4
10,000,000 } 25,000,000 }	20.6	20.6	19.6	18.3	18.6	19.2	18.9	17.8	9.7 7.6	8.7 7.3	18.4	9.1 7.4
50,000,000	6.8	7.9	8.7	9.0	8.5	8.7	7.8	7.6	8.1	6.8	8.0 -	7.3
100,000,000 } 250,000,000 }	19.4	30.2	38.7	43.7	47.1	48.0	48.2	53.5	11.1 41.5	11.3 46.1	46.9	11.2 44.2

Note: Percentages may not add to 100.0 because of rounding.

* Lower limit of size class in dollars. Data in *Statistics of Income* were classified in 10 size classes for 1946 through 1953 and 14 size classes for 1954 and 1955.

Footnotes and Source: Same as Table I.

ing earned statutory taxable income. In order to earn profits for the stockholders, corporations would like to shift the burden of the anticipated tax costs to others.

Ability to Shift the Tax. The corporate-income tax is neither a tax levied on the " economic profit " of a corporation, nor a tax levied on the income produced by the total assets of a corporation. The distribution of part of the total corporate income—the contractual distribution of interest to those suppliers

when they are expected to earn the planned, after-tax rate of return, or (2) substitute debt for equity financing.[7] These are alternatives which corporate managers might prefer to avoid in the absence of a tax.

[7] There is also the possibility of shifting the burden backward through the reduction of other costs. Examination of this possibility would require a separate paper. For an analysis of the effects on wage rates, see Richard Goode, *The Corporation Income Tax* (New York: John Wiley & Sons, 1951), pp. 62-68.

For example, let us assume Corporation X has $10 million of assets which have been acquired entirely by equity financing, and that the corporation is earning $1 million (10 per cent) on its assets by a 20 per cent margin on sales of $5 million. Then the levy of a corporate-income tax at a rate of 50 per cent would reduce the rate of return on stockholders' investment (total assets) from 10 per cent to 5 per cent. However, if the corporation doubled its physical volume of sales and obtained $10 million in revenue at the same price and cost per unit of sales, then the after-tax earnings on equity would remain at the rate of 10 per cent. The corporation would also preserve its after-tax rate of earnings on stockholders' investment if it increased dollar value of sales to $6 million by a 20 per cent increase in selling price with physical volume and unit cost remaining the same. In the long run, the rate of return would be preserved if demand for the product was increasing and the corporation added facilities only if they were expected to yield the planned after-tax rate. Lastly, if the corporation substituted $6 million of debt financing at $3\frac{1}{3}$ per cent interest, then the return on the smaller stockholders' investment of $4 million would remain at 10 per cent.

The last mentioned alternative in the example above, the encouragement of debt financing, is probably the most widely recognized effect of the corporate-income tax on corporate financial policy.[8] The problem is not, of course, one of substituting capital sources, as was proposed in the hypothetical example, but one of selecting the most appropriate method of financing. The considerations involved in selecting financial sources are numerous and complex; they have been carefully analyzed elsewhere and need not be discussed in this paper.[9] Nevertheless, there seems to be little doubt that debt financing may be utilized for purposes where equity financing might, in the absence of the corporate-income tax, be preferred by corporate managers. This would be particularly true of large, established and profitable corporations which have easy access to all capital markets and which can, consequently, choose from among alternative methods of financing.[10]

Of course, the encouragement of debt financing would tend to make interest rates higher than they would otherwise have been. However, it is doubtful that a change in interest rates which might result from the encouragement of debt financing would result in a reestablishment of rate-of-return goals by corporations.[11]

8 Dan Throop Smith, *Effects of Taxation: Corporate Financial Policy* (Boston: Harvard University, 1952), p. 17.

9 *Ibid.*, especially Chapter I for an analysis of debt and preferred-stock financing.

10 From a survey of business views, Kimmel writes: "This analysis suggests that the influence of the corporate income tax on decisions as to methods of financing may be less significant than has been commonly supposed. One reason is that the tendency towards a high ratio of debt to total capital employed can affect only the capital structures of those companies in position to make a choice. It is of little significance for most small companies. Ready access to the central capital markets is virtually nonexistent for the average small concern." *op. cit.*, p. 42. For the tax-burden question, which is the subject of this paper, the important point of Kimmel's observation is that the corporations which have "ready access to central capital markets" are the firms which pay almost all of the corporate-income tax.

For example, in 1954, U. S. Steel sold $300 million of debentures rather than raise equity money, and one of the important considerations was that ". . . for each dollar obtained, either in higher prices from customers or by cost reduction, to pay bond interest more than two dollars must be so obtained as to pay a dollar in dividend." United States Steel Corporation, *Annual Report 1957*, p. 27.

11 In testifying on General Motor's profit goal, Mr. Albert Bradley, Chairman of the Finance Committee,

(a) Short Run. In order to expand its dollar volume of sales on existing facilities, a corporation must either raise its price, increase its physical volume of sales, or both. From a partial equilibrium viewpoint, a large expansion of physical volume by a single corporation would probably, depending upon whether or not the firm happened to be equating its marginal cost and marginal revenue, result in a reduction in price greater than the reduction in per-unit cost from the spreading of overhead, and, consequently, both its before-tax and after-tax earnings would be reduced. However, if "all" corporations attempted to preserve, after taxes, their planned rates of return on stockholders' investments through the process of expanding the physical volume of output on existing facilities, then the attraction of resources into corporate activities— where resource prices are relatively higher than in many unincorporated areas—would result in an increase in national income, and, if per-unit costs of production did not change materially, then earnings after taxes might remain at the before-tax-change level, depending upon the responsiveness of demand in various industries to changes in income.[12]

On the possibility of raising prices, it is generally argued in the traditional view of incidence that corporations cannot raise prices because of "competition." This competition comes from other forms of business and from marginal producers.[13] However, the exist-

ket "drops." (This may explain, in part, recessionary price inflexibility.) On the other hand, firms must undertake the somewhat slower process of expanding facilities in order to take advantage of sustained market strength.

For example, Charles E. Wilson, President, General Electric Co., indicated in 1948: "You may well ask how we can absorb such large increases in payroll costs and material costs and still stay in business with an average increase of only 40 per cent in our selling prices. Part of the answer is, of course, the previously mentioned fact that we are obtaining a much lower profit rate [on each sales dollar] today. Expressing this somewhat more graphically, we have to deliver $1.68 worth of goods today to obtain the same amount of profit we got from $1 worth of products shipped in 1940. Another part of the answer is today's very high rate of production and the consequent greater spreading of overhead. That is why we are so concerned about our profit margin, which we know will shrink very sharply with any appreciable reduction in volume of business." *Corporate Profits*, Hearings before the Joint Committee on the Economic Report, 80th Congress, 2nd Session (1948), p. 481.

Of course, a large change in the corporate-income-tax rate could probably not be overcome by this process of expanding physical volume of sales. Furthermore, small firms may be unable to adopt this method of preserving, after taxes, the rate of return on stockholders' investment, and large firms may prefer to avoid it. From the viewpoint of business, the ultimate success of this type of "close-margin" business planning depends in large part upon the success of governmental fiscal and monetary policies in stabilizing aggregate demand. Hence, the ultimate, short-run burden of changes in the corporate-income tax will depend importantly upon the fiscal and monetary policies of government.

stated: "We have not changed our general sights in a period of over 20 years." *A Study of the Antitrust Laws*, Hearings before the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, U. S. Senate, 84th Congress, 1st Session (1955), part 7, p. 3585.

[12] In a dynamic view of the process, both prices and costs would be changing. Also, the increased output and sales might necessitate some expansion of short-run variable assets — that is, current assets. Nevertheless, firms can often obtain additional output and sales from existing facilities by utilizing stand-by and "excess" capacity. Operations at near-capacity levels and with narrow profit (after tax) margins are considered to be "dangerous" because firms cannot adjust easily to changes in market conditions. With narrow profit margins, corporate managers feel they cannot reduce prices to preserve volume if the mar-

[13] See, for example, Edwin R. A. Seligman, *The Shifting and Incidence of Taxation*, 5th ed. (New York: Columbia University Press, 1927), pp. 358-363. Also, Goode writes: "In many industries a considerable part of total supply is produced each year by firms that make no profits and hence pay no tax. . . . In trade and some other industries, corporate producers must face the serious rivalry of sole proprietorships and partnerships not subject to the corporation income tax. Profitable corporations cannot raise their prices to cover the corporation in-

ence of forms of business other than the corporate form is relatively unimportant, except in the areas of agriculture, services and trade, and, as shown in Table I, only 16.2 per cent of total corporate-tax collections have originated in these three categories. Secondly, the importance of the traditional marginal price maker, operating in a market with a large number of sellers and ease of entry and exit, exists, if at all, only in these same three areas and, perhaps, in construction, and these four categories have produced only 17.6 per cent of total corporate-income-tax collections. Therefore, the traditional view of " competition " as the regulator of price does not exist in the important markets in which the greatest portion of corporate-income-tax revenues are obtained.

This paper is not contending that marginal (no-profit) producers do not exist in manufacturing industries. An examination of the income statements of manufacturing corporations will reveal many firms without income. However, the producer who is making no return on his stockholders' investment would prefer to earn some income. From a partial-equilibrium viewpoint, if the demand for the industry's product is price inelastic, then a price increase will be welcomed by the marginal producer, since it may enable him to obtain some profit.[14]

come tax without risking loss of the market to their less successful rivals, to unincorporated businesses, or to other corporations managed by businessmen who do not regard the tax as a cost." *Op. cit.*, pp. 50-51.

[14] In the traditional view of incidence, it has been argued that: " If his competitor who pays a smaller tax because of smaller anticipated profits, or who perhaps pays no tax at all marks his goods at a lower price because of the smaller tax, all the others will have to follow suit whether their taxes are high or low." Edwin R. A. Seligman, *Studies in Public Finance* (New York: MacMillan, 1925), p. 73.

First, this argument assumes that marginal pro-

(b) Long Run. Even more important in the early period following the Second World War, the deferred demand for most manufactured products was greater than existing productive capacity could satisfy. Consumers possessed large money balances and had been unable to purchase many manufactured products; population was increasing; and disposable personal income was rising rapidly. Therefore, the amount of goods demanded at past price levels tended to exceed the amount which could be supplied when firms were operated at full capacity, and the equilibrium price

ducers are able to influence price because they supply a significant portion of the market. In many important industries, this would not be true. Secondly, it would seem to be equally or even more reasonable that the no-profit competitor might raise his price to the level charged by the profitable firms in the hopes of obtaining some profit. The 1958 price increase in steel, although coming after the period covered by the present study, will serve to illustrate this latter point.

In June, 1958, Alan Wood Steel Co., a specialty-steel producer that ranks 23rd in the nation in annual capacity, announced a price increase averaging $6 per ton to go into effect July 7. Alan Wood might be considered to be a marginal producer in the then-existing steel market. The company was paying its preferred dividends but had omitted the common dividend which would normally have been paid in June. The company had been paying 35 cents quarterly on the common stock before the omission.

On July 8, Alan Wood announced that it had cancelled the price increase which it had previously announced because the other steel producers had not gone along. However, on July 30, Armco Steel Co., the seventh largest producer, announced a price increase averaging about $4.50 per ton, and this announcement was followed by a general, industry-wide price increase by other producers. The price rise in steel was accompanied by a price increase in aluminum, a competing metal.

On August 18, the *Wall Street Journal* reported that steel orders were still rising despite the price increases. Furthermore, Alan Wood Steel, although reported as operating at only a " small profit " in July, was expecting to be in the black for the third quarter of the year, as contrasted with deficit operations for the third quarter of 1957. For the first half of 1958, Alan Wood earned 31 cents per common share on sales of $25,209,821, in contrast with $1.89 per share on volume of $36,366,322 in the first half of 1957.

in most manufacturing industries rose.

Since existing productive capacity was unable to satisfy the rapidly expanding demand for manufactured goods, it was necessary for most industries to build additional plant and equipment.[15] If decisions to add to plant and equipment were planned at a level which would yield a desired, after-tax rate of return on investment, then the tax became a part of the capital cost of the expanding firms, and the corporate-income tax became a part of the cost structure.[16] It would seem that corporations would consider the tax burden when making decisions to expand their productive capacity.[17]

Three specific examples involving large firms are presented in this paper to illustrate the relationship between taxes, prices, and investment decisions. The author does not intend that these examples should be construed as " typical; " however, they are important both as cases in point and also because these three firms " collected " almost 7 per

cent of the income-tax revenue obtained from all corporate enterprise for the period 1947 through 1955.[18] In addition, as dominant firms in their respective industries, these firms exercise a significant influence on prices.

First, in the manufacture and sale of automobiles and other products, General Motors employs its well-known standard-volume method of production planning and pricing.[19] In establishing prices on the basis of existing standard-volume investment, General Motors considers its costs—both per-unit overhead and per-unit variable (materials and labor) —plus the planned after-tax return on average investment.[20] This price must then be related to the price of the same line for the previous year and to the prices of competing automobiles in the same line.[21] In making decisions to in-

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[15] Much of the expansion in manufacturing industries took place through the growth of existing firms rather than through the entrance of new firms. New firms, moreover, would not enter a market unless they expected to earn profits, after taxes, on their stockholders' investments.

[16] Capital-budgeting techniques, which are a fairly recent development in the management of many corporations, would more likely be used by large, established and 'profitable corporations.

[17] I. Wayne Keller, Controller, Armstrong Cork Co., writes: " The return on capital employed is the ratio of after-tax profit to the capital employed. . . . After-tax profit is used because taxes on income are a cost and must be recovered in sales prices. In practice, many companies establish a goal return on capital employed and then increase the rate to provide for income tax. Calculations of return for internal uses are then simplified by the use of the before-tax goal per cent." Keller, " Pricing for Return on Capital Employed," N.A.C.A. Bulletin, Vol. XXXVIII Sec. 1 (January, 1957), pp. 635-36. (Italics in original.)

Also, see Stephen T. Heinaman, " Basing Capital Outlays on Return on Investment," N.A.C.A. Bulletin, Vol. XXXVIII Sec. 1 (April, 1957), p. 992.

[18] The year 1946 is omitted because the large firms were delayed in resuming operations because of postwar readjustment problems. General Motors accounted for 4.5 per cent of all corporate-income-tax collections and 7.5 per cent of the collections from manufacturing firms. U.S. Steel accounted for 1.3 and 2.2 per cent respectively, and General Electric, 1.1 and 1.9 per cent, respectively. The three firms accounted for 6.9 per cent of the collections from all corporations and 11.6 per cent of the collections from manufacturing corporations.

[19] This administrative technique was developed in the early 1920's by Donaldson Brown and Albert Bradley. It has been described in numerous publications. For a summary, see Stock Market Study, Hearings before the Committee on Banking and Currency, U. S. Senate, 84th Congress, 1st Session (1955), pp. 820-22. Business Week, April 6, 1957, pp. 61-66, also has described " How Detroit Figures Auto Prices."

[20] A Study of the Antitrust Laws, Hearings before the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, U. S. Senate, 84th Congress, 1st Session (1955), part 7, pp. 3607-10.

[21] Ibid. The price established by General Motors may control the prices of competing lines. For example, in the fall of 1956, Ford announced prices for the 1957 line about 3 per cent higher than in 1956. Chevrolet prices, however, were announced at a level 6 per cent higher. Ford, then, revised its scale upward to follow Chevrolet. Business Week, April 6, 1957, p. 62.

vest and expand productive capacity, General Motors plans to earn approximately 20 per cent after taxes on its net worth.[22] If General Motors is able to sell its planned volume of production at the prices established, then corporate-income taxes enter the price as a cost of production;[23] if the company is having difficulty in selling its products at these prices, then there is no reason to expand productive capacity. Hence, following the Second World War, when productive capacity was greatly expanded, it seems that corporate-income taxes did largely enter the cost structure of General Motors products.

Similarly, Ralph J. Cordiner, Chairman of the Board of General Electric Co., although not specifically outlining pricing practices, has argued that: "High corporate income taxes are inflationary in themselves since they represent a cost to business which tends to be reflected in pyramiding price increases."[24] This statement suggests that General Electric attempts to treat the tax as a cost in establishing its prices. Furthermore, at another time, Mr. Cordiner has indicated that his company will spend money only on new installations that "have prospects of earning a return of at least 7 per cent of sales after taxes or 20 per cent return after taxes on the money invested."[25] If this view of expected rate of return has controlled General Electric's expansion program in the entire postwar period, then the fact that the company has expanded indicates that either prices have risen to cover the corporate-income tax as a cost or, if the full adjustment has not come through price, other costs have been reduced enough to allow the inclusion of the corporate-income tax in the cost structure.

Spokesmen for U. S. Steel have long taken the position that corporate-income taxes are costs which must be paid by the consumer.[26] In explaining the higher price of steel in 1948, Enders M. Voorhees, Chairman of the Finance Committee, indicated that wages and taxes were primarily responsible for the increase. Furthermore, the higher price was necessary not only to cover the higher wages and taxes of U. S. Steel but also the wages and taxes of suppliers and sub-suppliers.[27] Mr. Voorhees also has indicated that " . . . when it comes to a new plant, to deciding whether United States Steel is going to spend new money, then we study the investment of that new money very carefully and exhaust all the possibilities with respect to the return on that investment."[28] One of the possibilities which would presumably be investigated would be the taxes on corporate income.[29]

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[22] A Study of the Antitrust Laws, part 7, pp. 3584-87 and part 8, pp. 4052-53. General Motors would apparently not go into the production of any product ". . . unless we thought we could make a profit when we got going." Ibid., pp. 3589-90. The company uses the rate-of-return test both in evaluating manager performance in its various divisions and in evaluating projects.

[23] Short-run shifting has resulted from increased turnover as well as from higher prices. " We have kept our earnings on our net investment up by turning over faster in recent years, but without an improved profit margin on sales." Ibid., p. 3585.

[24] Investigation of the Financial Condition of the United States, Compendium of Responses to the Questionnaire of the Committee on Finance, U. S. Senate, 85th Congress, 2nd Session (1958), Chapter 2, p. 195.

[25] New York Times, May 5, 1957, III, 1:1.

[26] New York Times, October 10, 1943, V, 11:4. For a more recent statement, see United States Steel Corporation, Annual Report 1957, p. 29.

[27] Corporate Profits, Hearings before the Joint Committee on the Economic Report, 80th Congress, 2nd Session (1948), p. 600.

[28] Study of Monopoly Power, Hearings before the Subcommittee on Study of Monopoly Power of the Committee on the Judiciary, House of Representatives, 81st Congress, 2nd Session (1950), part 4A, p. 636.

[29] Administered Prices, Hearings before the Subcommittee on Antitrust and Monopoly of the Com-

The pricing, output, and capital-budgeting practices which have been discussed in this paper are forces which operate on the supply side of manufacturing operations. These practices would be most characteristic of the operations of large, established, and profitable corporations. The existence of long-term profits which might ordinarily attract new firms may not effectively do so in many industries because of technological obstacles to entry. Moreover, new firms and new capital do not enter into industries unless there is a reasonable expectation of a return on investment commensurate with risk, and corporate-income taxes are a deduction before arriving at the return on stockholders' investment. Therefore, the supply side of corporate operations would seem to have included the corporate-income tax as a part of capital cost.

On the demand side of corporate operations, one important development characteristic of the period 1946 through 1955 will be surveyed briefly in this paper—that is, the role of the federal government as the single largest purchaser of goods.[30] In military procurement contracts, the federal income and excess-profits taxes are specifically listed among " items of unallowable costs." [31]

Nevertheless, the nature of military procurement is such that taxes on income often enter into prices, and in the renegotiation of contract prices, " the amount of taxes has to be figured in it, and is figured in each and everyone of them." [32] Military procurement in 1951 through 1953 was about 89 per cent on a negotiated basis, and, during this same period, approximately 65 per cent of military prime contracts were placed with the 100 largest contractors.[33] Negotiated placement may, but generally does not, involve " competition "—that is, negotiation with more than one supplier.[34] When negotiation takes place with a single supplier, the corporate-income tax will undoubtedly enter the price and will be considered if the price

reimbursement contracts and serves as a " guide " in the negotiation and price redetermination of fixed-price contracts. See, Paul M. Trueger, *Accounting Guide for Defense Contracts*, 2nd ed. (Chicago: Commerce Clearing House, 1958), Chapters XI and XII.

[32] *Renegotiation of Contracts*, Hearings before the Committee on Ways and Means, House of Representatives, 81st Congress, 2nd Session (1950), p. 55.

The theory of renegotiation is that " it is an attempt to secure retroactively and on an over-all basis the proper price. . . ." *Renegotiation of Contracts*, Hearings before the Committee on Finance, U. S. Senate, 82nd Congress, 1st Session (1951), p. 14. Unreasonableness of profits is determined after taxes. If profits after taxes are determined to be unreasonable, a new price is determined, and the contractor is " allowed a reasonable profit after the taxes are adjusted." House Hearings, *op. cit.*, pp. 55-56.

[33] *Defense Production Act—Progress Report No. 27*, Hearings before the Joint Committee on Defense Production, 83rd Congress, 2nd Session (1954), pp. 71-72. These three years would be fairly representative of the entire period.

[34] For example, in the negotiation of aircraft purchases, which have constituted a large part of total military procurement, there is really no significant competitive bidding. Almost all negotiations take place with a single contractor. See, *Renegotiation Act Extension*, Hearings before the Committee on Finance, U. S. Senate, 84th Congress, 1st Session (1955), pp. 7-8, and Joint Committee on Defense Production, *op. cit.*, p. 73.

mittee on the Judiciary, U. S. Senate, 85th Congress, 1st Session (1957), part 2. See especially the testimony of Robert C. Tyson, Chairman of the Finance Committee, pp. 242-261, and of Richard F. Sentner, Vice President for Sales, pp. 351-64.

[30] The federal role in promoting employment and growth will also have an important bearing on the question of the corporate-income-tax burden. (See footnote 12 of this paper.) The analysis in this paper has assumed that the goals of monetary and fiscal policies are those set out in the Employment Act of 1946, as they apparently have been interpreted by both major political parties—that is, substantial emphasis on " full " employment of labor resources.

[31] 32 CFR 15.205(i). ASPR XV controls the determination of costs in the negotiation of cost-

is subject to renegotiation.[35] In a sense, then, the corporate-income taxes collected from firms engaged in the production of many defense procurement items are " paid " by the tax collector—that is, the federal government.

Conclusion

It is impossible to isolate completely the influences of the corporate-income tax on commercial and financial policies, since these policies are determined by a multitude of considerations. Therefore, in the sense of traditional incidence theory, it is probably impossible to " determine " the ultimate burden of the tax. Nevertheless, any investigation of the burden of the tax must take into consideration the practices of the large corporations which pay a substantial proportion of the total corporate-income tax. The corporate decisions which will importantly influence the ultimate burden of the tax are those concerned with (a) methods of financing, (b) pricing and output, and (c) expansion of facilities.

(a) The encouragement of debt financing has long been recognized as a consequence of the present type of corporate-income tax. This encouragement is important primarily for those firms which have easy access to all capital markets; these firms, in turn, are the ones which pay a large percentage of the total corporate-income tax. There are,

however, numerous considerations other than the corporate-income tax which influence methods of financing.

(b) In the short run, corporations may attempt to adjust to changes in the corporate-income tax by raising prices or by increasing output from existing facilities. Large corporations, being able in most industries to influence prices and to " control " current production, may preserve their rate of return on investment by raising prices or by " close-margin " planning of current output. For small corporations, however, statutory taxable profits are more in the nature of a " wind-fall " return, and, in this sense, small firms may be said to bear a part of the short-run burden of changes in the corporate-income tax.

Any attempt to determine the short-run distribution of tax burden would involve an elaborate study of industries, price leadership, current output planning, and changing patterns of product demand. This author would tentatively estimate that no less than 50 to 60 per cent of the short-run burden of a moderate increase in the corporate-income tax would be shifted to others.[36]

[35] This does not deny that there may be disagreement between the government and the contractor as to the reasonableness of the after-tax rate of return. However, the tax is not itself the reason for this disagreement. Contractors may simply not be allowed to negotiate as large a rate of return as they would like to receive.

Also, government contracts do not guarantee that the contractor may not incur a loss. See, for example, the report on President Eisenhower's veto statement on H. R. 5904 in the *Wall Street Journal*, August 19, 1958, p. 9.

[36] Based on the assumptions that (1) the ability to shift the tax is related to the size of manufacturing corporations and (2) the proportion of taxes collected from the various size classes would be the same after the tax change as before. It is further assumed that, taking the tax years 1954 and 1955, manufacturing corporations with $250 million and more of assets are able to shift all of this proportion of the tax; the next smaller size class is assumed to shift 90 per cent; then, 80 per cent, etc. None of the taxes " paid " by corporations in the 4 smallest size classes of 1954-55 (less than $250,000 in assets) is assumed to be shifted. In addition, the taxes " collected " from electric, gas, and telephone utilities are assumed to be shifted. There seems to be little question that these utility taxes are shifted, with perhaps some delay as taxes change, through an increase in rates. Demand in these utility fields is growing rapidly, and the legal intention of regulation is that the tax should be paid by the consumer. For a brief discussion of demand in the electric-power industry,

(c) In longer periods of production planning, however, all corporations would be expected to consider the corporate-income tax in making decisions to expand in present industries or to enter new industries. Therefore, in the postwar period, when demand was increasing rapidly and the distinction between short run and long run was relatively less important than usual, the burden of the tax was probably shifted almost entirely to others.

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see Michael Gort, "The Planning of Investment: A Study of Capital Budgeting in the Electric-Power Industry, II," *Journal of Business of the University of Chicago*, Vol. XXIV (July, 1951), p. 189.

The estimate made here is "conservative" in that it disregards the possibility of some shifting in other areas—trade, finance, other utilities, and other industries. Also, it does not consider the tax as shifted when small manufacturing corporations are enabled to charge higher prices, and perhaps obtain larger before-tax profits, as a result of price increases by large, dominant firms. The estimate is "liberal" in that it disregards the fact that all large firms are not dominant, although the analysis is not entirely dependent upon this point.

A detailed study of industries, price leadership, current output planning, and changing patterns of product demand might find that as much as 70 to 80 per cent of the short-run burden of a moderate tax change would be shifted.

THE 1958 TEMPORARY UNEMPLOYMENT COMPENSATION ACT

MAURICE C. BENEWITZ *

I

A NATION-WIDE federal-state system of unemployment insurance resulted from the passage of the Social Security Act of 1935. Title IX established a 3 per cent Federal employment tax on employers of eight or more in covered occupations, 90 per cent of which could be remitted to employers in states with unemployment-insurance laws meeting minimum standards. These standards concerned methods of payment, use of funds collected, methods of administration, and controls over taxing methods. The substantive rights of the insured worker—amount and duration of benefits, eligibility, and disqualification provisions—were left to state control except for the " labor standard " of Title IX. This provided that benefits should not be denied to an otherwise eligible person if he refused work where the vacancy was due to a trade dispute, for which wages, hours, and other conditions were substantially inferior to those for other similar work in the vicinity, or which required as a condition of employment that he resign from or refrain from joining a labor organization, or which required that he join a company union.

Since the passage of the original act, there have been few changes in federal legislation that affect the substantive provisions of the unemployment-insurance system. The states enacted laws which differed widely in matters of amount and duration of benefits, base-period requirements, methods of experience rating, eligibility, disqualification provisions, and so on.

Though changes in federal legislation have been few and for the most part minor, many observers have criticized the degree of federal participation in the system and the performance of the states. Dissatisfaction has centered particularly on the effects of competitive rate reduction inherent in experience rating. Thus a statement by J. Douglas Brown, Frederick H. Harbeson, and Richard A. Lester, to which eighteen other academic economists subscribed, in March, 1958, charged:

> The shortcomings of our state-federal system of unemployment insurance do not arise out of a lack of federal funds, but rather out of a long-standing lack of federal standards designed to strengthen the capacity of the system to protect our citizens in a period of heavy unemployment.
>
> Without federal standards in respect to minimum contribution rates, states have competed in reducing such rates. The effect of this competition has been: a) inadequate benefit scales, b) inadequate durations, c) arbitrary eligibility requirements, and d) arbitrary disqualifications.[1]

Similar conclusions were drawn by the

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[1] U. S. House, Committee on Ways and Means, 85th Cong., 2d Sess., *Hearings, Emergency Extension of Federal Unemployment Compensation Benefits,* (1958), p. 370. Hereinafter these hearings will be referred to as *House Hearings.*

Advisory Council on Social Security in 1948 when it recommended significant changes in financing methods to overcome these results.[2] Since 1942 a number of bills have been introduced to increase federal participation in financing and to establish minimum federal standards concerning other substantive aspects of the federal-state system.[3] None of these proposals was enacted.

In 1958 against a backdrop of recession and unemployment higher than at any other time since 1941, attention was again drawn to the operations of the unemployment-insurance system. Unemployment was high, ranging between 4,494,000 in January and 5,437,000 in June.[4] More ominously, exhaustions of unemployment-insurance benefits were steadily rising. As of June 30, 1958, 1,560,000 persons had exhausted their benefits under state compensation laws and were eligible for extended benefits under the Temporary Unemployment Compensation Act of 1958. In May, Secretary of Labor Mitchell estimated that 2.6 million persons would exhaust their benefits in the calendar year 1958.[5] Additional millions of persons were not covered by unemployment insurance at all.

A majority of observers was agreed that some action to improve unemployment insurance was necessary. One widely held view was expressed by Senators Paul Douglas and Robert Kerr in their minority report on the Temporary Unemployment Compensation Act of 1958. They wrote:

> At the same time that Congress provides emergency benefits for the immediate period of heavy unemployment, we should take this occasion to raise the level of protection which is now afforded the unemployed by providing certain minimum standards for these State systems.[6]

This view was shared by Senator John Kennedy, whose bill attempted to accomplish the dual aim,[7] and by many others.[8] This argument also held that since unemployment is a national problem, national standards and national reinsurance are necessary.[9]

The other view concerning possible courses of action was that federal intervention should be temporary and should not attempt to alter state substantive standards. This was the position of the Eisenhower administration. It was reflected in the presidential message transmitting the administration-recommended measure, which largely determined the final legislation. This bill made possible through federal financing an increase of 50 per cent in the maximum amount of benefits paid to a worker after his state rights had been exhausted. President Eisenhower wrote concerning his proposal:

> These recommendations reflect my strong conviction that we must act promptly, emphatically, and broadly to temper the

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[2] U. S. Senate, Committee on Finance, 85th Cong., 2d Sess., *Unemployment Insurance*, Sen. Doc. No. 206.

[3] For example, H.R. 6559 (1942) War Displacement Bill; S. 2051 (1944) War Mobilization and Reconversion Bill; S. 1274 (1945) Amendments to the Reconversion Act of 1944; H.R. 8095 (1950); H.R. 525 (1951); S. 2504 (1952).

[4] U. S. Department of Commerce, Bureau of the Census, *Current Population Reports, Labor Force*, Series P-51, Nos. 188-192.

[5] U. S. Senate, Committee on Finance, 85th Cong., 2d Sess., *Hearings on H.R. 12065* (1958), p. 86. Hereinafter these hearings will be referred to as *Senate Hearings*.

[6] U. S. Senate, Committee on Finance, 85th Cong., 2d Sess., *Report No. 1625*, Part 2, p. 1

[7] See his testimony in *Senate Hearings*.

[8] See *House Hearings*, p. 370, and *Senate Hearings*: statement of Wilbur J. Cohen, pp. 175 ff., and of Nelson Cruickshank, pp. 388 ff. *New York Times*, March 13, 1958, pp. 1: 8, 15: 3.

[9] U. S. Senate, Committee on Finance, 85th Cong., 2d Sess., *Report No. 1625*, Part 2, p. 4.

hardship being experienced by workers whose unemployment has been prolonged. They also reflect my conviction that the need for additional assistance . . . will be of relatively brief duration.

Such legislation should not encroach upon the prerogatives which belong to the states, and matters of eligibility, disqualification, and benefit amounts should be left to the state.[10]

Secretary Mitchell repeated these administration views concerning the proper scope of emergency legislation (i.e., compulsion to act without requirement of change in state standards) even while conceding that state standards with respect to benefits and the like were inadequate. He contended that changes in standards should not be made in a limited emergency program.[11]

Some groups (particularly business groups) opposed any federal action at all, holding that " another effort is shaping up to impose federal standards and controls on state unemployment compensation systems as an emergency device." [12]   Milton C. Lightner, President of the National Association of Manufacturers, charged that President Eisenhower's proposal utterly ignored all possibility of efforts to solve the problem by action of the states.[13]   These groups also contended that the proposal to extend the benefit period was a relief program disguised as unemployment compensation.[14]   Similar positions were taken by representatives of some state unemployment-compensation commissions.[15]   Most of these groups indicated

10 *New York Times*, March 25, 1958, p. 25: 5.

11 See *House Hearings,* p. 12.

12 Ohio Chamber of Commerce, quoted 41 LRR 406.

13 *New York Times*, March 20, 1958, p. 20: 5.

14 R. T. Compton, National Association of Manufacturers, quoted in 41 LRR 466.

15 See statements of J. Eldred Hill, Jr. in *Senate*

a preference for H.R. 12065 to any other bill because it made state action optional.

This article proposes to trace the substantive changes which have occurred in unemployment insurance due to federal legislation and the charges and counter-charges of inadequacy and proposals for change which have been made.   The major bills introduced in the Congress in the 1958 session and the final legislation will be examined; their provisions will be compared with the various proposals for improvement which have been made.   Finally, some evaluation of what has been accomplished and what remains to be done will be attempted.

II

The Social Security Act of 1935 as it relates to unemployment insurance has had few substantive amendments since its passage.   There have been some changes in the number of workers covered which on balance has expanded coverage.[16]   The federal tax which at first applied to all covered wages was limited to the first $3,000.[17]   Other amendments of substantive importance were those which established loan funds intended to provide aid for states with unusually large benefit payments relative to income and reserves.[18]

Hearings (pp. 135 ff.) and Marion Williamson (pp. 165 ff).

16 Railroad workers were excluded in 1938; other workers in 1939 and 1948.   Federal civilian employees were brought under in 1954.

17 Taxable wages constituted 98 per cent of total wages in covered employment in 1939 when this amendment was enacted.   By 1955, this percentage had fallen to 68 per cent.   See H. M. Somers and A. R. Somers, " Unemployment Insurance and Workmen's Compensation," *Proceedings of Ninth Annual Meeting of Industrial Relations Research Association,* December, 1956, p. 139.

18 These loans were initially provided in 1944 and made permanent in 1954.

While every state plus the District of Columbia, Hawaii, and Alaska has enacted an approved law, their diversity is great. Coverage closely follows that under the Federal Unemployment Tax Act, except that 23 jurisdictions cover smaller firms than those covered under the federal act. Still, only 80 per cent of all employees are covered,[19] and the Bureau of Employment Security estimated that of 5,198,000 unemployed in March, 1958, 1,919,127 were not protected by unemployment insurance.[20] Willcox has suggested that the discouraging expansion in unemployment-compensation coverage as compared to the expansion in old-age-and-survivors'-insurance coverage may be attributed to the division of responsibility between the federal government and the states.[21] And other observers have felt both that minimum federal standards may be necessary in the area of coverage if the states would not act[22] and that the problems of administration in covering new groups would be simplified by following OASI experience.[23]

Every law has eligibility requirements which must be met in order to receive benefits. In every state, eligible applicants may be disqualified for any of a large number of causes, although the " labor standard " of the Social Security Act sets minimum standards in this area by precluding certain types of disqualifications. Most of the original state laws merely postponed benefits for some reasonable period when disqualification was the result of voluntarily leaving without good cause, misconduct discharges, or refusal of suitable work. The reasoning was that continued unemployment was due to economic causes rather than personal fault. As the laws have developed, " there has been an increasing tendency to cancel a worker's benefit rights or reduce his benefits by the number of weeks of disqualification." [24]

Many observers attribute the increased stringency of disqualification provisions to interstate rate competition and to the influence of business groups who believe insurance should be paid only for unemployment attributable to the employer. Both of these reasons were cited by DeVyver as suggesting the need for federal standards in this area.[25] The interstate-competition approach was presented by Professor Lester in his testimony at the Senate Hearings on H.R. 12065 [26] and in the economists' statement on Federal Supplementary Unemployment Benefits, of which he was a co-signer.[27]

Over the years benefits have tended to increase. But improvements have not kept pace with increasing average weekly wages. Unemployment insurance was intended to replace approximately 50 per cent of wage loss, but at the end of 1957 only seven states had a maximum benefit equal to 50 per cent or more of the average weekly wage in covered employment.[28] Since 1954

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[19] See statements of Wilbur J. Cohen in *Senate Hearings*, p. 176.

[20] *Congressional Quarterly, Weekly Report*, week ending April 18, 1958, p. 477.

[21] Allanson W. Willcox, " The Coverage of Unemployment Compensation Law," *Vanderbilt Law Review*, Feb., 1955, pp. 283-84.

[22] F. T. DeVyver, " Federal Standards in Unemployment Insurance," *ibid.*, pp. 430-431.

[23] A. Larson and M. G. Murray, " The Development of Unemployment Insurance in the United States," *ibid.*, p. 213.

[24] Larson and Murray, *op. cit.*, p. 216.

[25] DeVyver, *op. cit.*, pp. 434-435.

[26] See statement of Richard A. Lester, in *Senate Hearings*, p. 276.

[27] Reference to n. 8 above.

[28] A. B. Ratcliff, " Highlights in State Unemployment Insurance Legislation," *The Labor Market and Employment Security*, December 1957, p. 2.

President Eisenhower has urged state action to correct this problem.[29] Others have suggested legislation providing an automatic adjustment of the maximum benefit, as in Utah and Wyoming, when the average weekly wage changes.[30] Still others believe federal standards are necessary to establish acceptable benefit standards.[31]

Many observers have urged an extension of the duration of benefits. At the end of 1957 only eight states provided uniform benefits of 26 weeks or longer,[32] a duration urged recently by President Eisenhower.[33]

Finally, all state reserves are isolated from one another so that even if the over-all position of the system is sound, some states may be in difficult reserve position. At the end of fiscal 1957, though most jurisdictions were in a very strong position, five jurisdictions had reserves which were less than 5 per cent of taxable wages.[34] The loan-fund procedure is meant to aid such states, but the loan must be repaid if the state's condition improves. Reinsurance has been suggested as a more equitable solution by those who believe unemployment is a national rather than a state problem.

This survey of federal and state legislation reveals that federal minimum standards have been suggested in the substantive matters which have been largely left to the states in the past

—coverage, eligibility, disqualification, amount and duration of benefits, and reinsurance. Congress has not acted on such recommendations in the past, and, in this respect, has been supported by business groups and by some state administrators. This pattern was to be repeated in 1958. Employer groups contended that federal standards would interfere with states rights and that liberalization would pervert the insurance principle.[35] All of their testimony at the House and Senate Hearings on the 1958 legislation contended that the states were capable of action and should be allowed to make whatever changes which might be enacted. These groups also feared that federal emergency legislation might threaten the experience-rating system.[36]

While the President in his message recommending H.R. 11679 and Secretary Mitchell in his testimony before the Ways and Means Committee held that questions concerning benefits, eligibility, disqualification and the like should be left to the states, they denied the business-group charge that the temporary extension legislation would endanger the insurance principle.[37] At the same time, such academic experts as J. Douglas Brown strongly supported this aspect of the business view, although disagreeing in other respects with them.[38] He and his colleagues charged that the temporary extension

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[29] Economic Report of the President, 1958, p. 65.

[30] M. C. Benewitz, "Equity and Maximum Benefits in Unemployment Insurance," National Tax Journal, X (December, 1957), p. 343.

[31] Senators Kennedy, Douglas, and Kerr, and Professors DeVyver and Lester, for example.

[32] Ratcliff, op. cit., p. 3.

[33] Economic Report of the President, 1958, p. 65.

[34] U. S. Department of Labor, Bureau of Employment Security, "Recent Experience in Unemployment Insurance Financing," The Labor Market and Employment Security, March 1958, p. 19.

[35] Congressional Quarterly, Weekly Report, week ending April 18, 1958, p. 478.

[36] For examples of such testimony see statements of R. T. Compton (NAM), Vernon Herndon (pp. 100 ff.) and Frank B. Cliffe (Chamber of Commerce of the United States) (pp. 297 ff.) in House Hearings. Statements of Roger H. Davis (pp. 193 ff.), J. Randolph Kenny (pp. 249 ff.), Rowland P. Jones, Jr. (pp. 272 ff.) in Senate Hearings.

[37] New York Times, April 14, 1958, p. 188.

[38] New York Times, April 20, 1958, P. IV: 8: 8.

bills would create a " dole," that to confuse unemployment insurance and unemployment relief would undermine the basic principles of our whole social insurance program." [39]

III

A number of problems were faced before the Temporary Unemployment Act of 1958 was agreed upon. Should the opportunity be utilized to impose federal minimum standards and federal reinsurance, or should legislation grant temporary aid to exhaustees without otherwise altering the system? Should uncovered workers be aided? How? Should aid be financed by outright grants or by some method requiring future repayment? Should the program for extended benefits be optional or compulsory for the state? Should there be *any* legislation to do what the state legislatures had not desired to do themselves?

Most of the bills introduced in the 1958 legislative session were concerned only with temporary adjustments to meet the then-existing employment problems. This was true of the administration measure (H.R. 11679), the Mills-McCormack bills (H.R. 11326, H.R. 11327), the bill recommended as H.R. 12065 by the Ways and Means Committee, the vastly different House-passed version of H.R. 12065, the Case-Javits bill (S. 3464), and a host of others. Though they all dealt only with the immediate problems of exhaustion of benefits, there were great differences between them.

Only one major bill, that of Kennedy and McCarthy (S. 3244 and H.R. 10570), sought to deal both with the temporary unemployment problem and with the recommendations for basic

[39] Cited in n. 1 above.

change in the permanent federal-state program. The aims, if not all of the specific provisions of this bill, were supported not only by labor organizations, but also by many Governors and State Commissions, and by academic observers,[40] but it was not seriously considered in either House of Congress. Attempts by Senators Kennedy, Douglas, Kerr and others to amend H.R. 12065 so that it resembled S. 3244 were defeated in the Committee on Finance and on the Senate floor.[41]

In brief summary, the administration bill (H.R. 11679) proposed:

1. To extend benefits of otherwise eligible individuals whose benefits rights had been exhausted on or after December 31, 1957 for weeks beginning before April 1, 1959 and 30 days after federal enactment.

2. To limit total benefits paid to 50 per cent of the exhausted benefits.

3. To pay weekly benefits equal to those exhausted. Partial benefits were to be computed according to state law also.

4. To empower the Secretary of Labor to enter into agreements with each state, or with a federal agency if a state refused, and to act as agent for the United States in disbursing benefits.

5. To provide for an increase in the Federal unemployment tax if, by January 1, 1963, benefit amounts paid plus the costs of state administration plus the state's proportionate share of other costs had not been repaid.

In testifying on this bill, Secretary of Labor Mitchell stated that it would

[40] See statements of Nelson Cruikshank, in *Senate Hearings*, pp. 388 ff.; Governor Meyner, pp. 284 ff., William L. Batt, pp. 378 ff., Wilbur J. Cohen, pp. 175 ff., and Richard A. Lester, pp. 275 ff.

[41] *New York Times*, May 23, 1958, p. 11: 2. *New York Times*, May 28, 1958, p. 1: 3.

neither impose any Federal standards on the States nor change in any way the standards which the states have set in their unemployment compensation laws with respect to weekly benefit amount, eligibility or disqualification.[42]

He estimated that repayment of the costs by increased payroll taxes would require three years on the average.[43]

The Mills-McCormack bills, H.R. 11326 and H.R. 11327, also dealt only with persons whose benefit rights under some regular state or federal program had been exhausted. The states were again to act as agents and, except with respect to benefits, state standards were to govern. However, some major differences existed.

1. Benefits were to be paid for a temporary duration of 16 weeks and it was developed in House hearings that this meant up to 16 weeks for each incident of unemployment in the benefit year.[44]
2. Benefits were to be computed on the basis of one-half of the individual's average weekly wage but not to exceed two-thirds of the state's average weekly wage in the last full year for which data were available.
3. Benefits were to be paid for unemployment beginning after January 1, 1958 and before July 1, 1959.
4. Financing of additional benefits and costs was to be by federal grant.

Speaking of benefit provisions of this and similar proposals, Secretary Mitchell noted that they "would result in discriminatory treatment between those drawing regular and those drawing the federal benefits."[45] Regular benefits would still be computed according to

42 See House Hearings, p. 11.

43 Ibid., p. 12.

44 Ibid., p. 42.

45 Ibid., p. 12.

state law.

The bill which finally was enacted, H.R. 12065, as amended on the House floor, followed the original administration bill but with the following differences:

1. State acceptance of aid is voluntary, benefits being paid only after an agreement has been entered into with the state or a state agency.
2. Those eligible must have exhausted benefits after June 30, 1957 (or later date set by the state) and benefits will not be paid for weeks beginning after April 1, 1959.
3. Benefit amounts, both total and weekly, will include payment for dependents where provided in state law.

Before passing this bill, the House considered a vastly different H.R. 12065 recommended by the Ways and Means Committee. The major provisions of this bill under Title I were:

Provision of payments to workers exhausting benefits under state or federal programs after June 30, 1957 (with no discretion as to cutoff date). These payments would begin after an agreement had been made with the state (and 15 days after enactment) and would continue for weeks beginning before November 1, 1959 for unemployment beginning and claimed before July 1, 1959. Total benefits could equal 16 times the weekly benefit amount including dependents allotments payable under the state or federal law under which the applicant exhausted benefits. Weekly benefit amounts would be the same as under state law. Applicants could receive payments for more than 16 weeks if they were receiving only partial benefits. No provisions were made for repayment.

Under Title II it was provided that:

Where the state entered an agreement, payments to persons who had never been

covered by state or federal law would be made if they could meet the eligibility standards set by the state law with respect to work experience. Benefits would be computed by the formula used for covered employment and the total benefits could not exceed 16 times the weekly amount.

The effective date of this title was to be 45 days after enactment or upon the conclusion of a federal-state agreement, whichever was the later.

By the time the House considered and passed H.R. 12065 as amended, the principle of compulsory action favored by the President, Secretary Mitchell, and Congressmen Mills and McCormack had been dropped, and the House never seriously considered any fundamental and permanent changes in the federal-state system. Yet the Kennedy-McCarthy bill provided a vehicle for fundamental changes, had Congress desired it, as can be seen from its following main provisions that differed from the other bills.

1. The harshness of state disqualification provisions would be reduced by providing for a maximum postponement (not cancellation of benefit) of 4 weeks in most cases and of 12 weeks for fraud. Strike disqualifications would not be allowed when the employer failed to conform to federal or state labor-standards legislation.

2. A uniform maximum duration of 39 weeks would be created.

3. Automatic integration of unemployment compensation and supplemental unemployment benefits would be provided.

4. Coverage would be extended to firms employing 1 or more employees and to a group of agent drivers, homeworkers, and salesmen presently excluded in many laws.

5. States were to be allowed the option of giving uniform rate reduction in

place of individual experience rating if they so desire.

6. A federal reinsurance fund would be established. States with a minimum contribution rate of 1.2 percent would be eligible for reinsurance if the balance in the state fund on the last day of a quarter were less than benefits paid over the six months ending on that day. During the next quarter the state would receive 75 percent of the amount by which benefits exceed 2 percent of taxable payroll.

7. Temporary supplemental aid would be provided to the states while they altered their laws to meet these minima. A state would become an agent, if it agreed, for the United States until July 1, 1959, to pay the benefits provided above under the conditions set forth. The United States would bear all additional cost of meeting these provisions. Only presently covered workers would receive extended benefits.

IV

In evaluating the Temporary Unemployment Compensation Act of 1958 and the other proposed legislation, we must ask how each bill met the suggestions for change made in the past, and how the provisions would be expected to work in practice. Five major bills concerned with altering the unemployment insurance system were introduced in the 1958 Congressional session. Of these bills, only the Kennedy-McCarthy bill dealt with all the major areas of reform surveyed in this article, and on a permanent basis. Despite questions about some provisions, this writer feels that this bill came nearest to meeting the present and future needs for change.

Voluntary Action by States Versus Compulsion

Only three of the bills compelled the

states to act. Both House bills required temporary action to extend benefits durations either by 50 per cent of the original duration or by 16 weeks, and, in the case of one, the states were also required to raise benefits for those getting federal extensions to 50 per cent of the worker's average weekly wage.

Secretary Mitchell had argued originally for federal action and compulsion on the grounds that the states could not act quickly in the current emergency and that some might not act at all.[46] Later he accepted the optional features of the final legislation.

Opposition to the compulsory features of the House bill, however, was very wide. It was argued by certain academicians that temporary benefits paid in the ways proposed would undermine the contributory system and compel payment of monies contributed for insurance as relief. Moreover, they also argued that compulsion was unjustified in a temporary program where repayment was necessary. These views were very similar to those in the union movement.[47]

In their objections to the compulsion in the House bills, these academic economists were joined by most employer organizations whose representatives argued that the compulsory extension of benefits was drastic in a period in which unemployment did not exceed that of many post-war periods, and that this was a misuse of unemployment insurance for relief purposes. The business groups, and many state administrators as well, did not share the academic and union preference for the Kennedy-McCarthy bill, but favored one in which participation by the states was optional.[48]

Senator Kennedy testified against the optional feature in H.R. 12065. He stated:

> It simply permits each State Legislature, if it so wishes, to use its own resources or credit to extend its own benefit period by as much as it likes up to 50 percent— all of which it can do now, without paying any administrative costs.[49]

Senator Douglas and others vigorously argued in the Senate that the states would not accept the aid offered in H.R. 12065, since it would place them at a competitive disadvantage when taxes were raised to repay the loans.[50] Furthermore, 26 state governors and administrators felt that legislative action or a constitutional amendment would be needed before action were possible.[51]

These doubts concerning the probability of state action proved to be partially correct and partially wrong. Only 15 states and the District of Columbia had taken action to qualify under the law by mid-summer. But these states included many large industrial centers: California, Indiana, Massachusetts, Michigan, New Jersey, New York, and Pennsylvania. In addition, 5 other states had extended emergency aid from their own resources, and these included 2 additional industrial states of importance, Illinois and Ohio.[52] Nonetheless, some 30 of the 51 jurisdictions had taken no action to extend benefits as of mid-1958.

It appears valid to criticize those laws which compelled payment of some temporary benefit without changes in standards. The contributory principle in so-

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[46] *Ibid.*, pp. 11 ff.

[47] See earlier citations in footnotes 1, 8, and 38.

[48] See citations in footnote 36.

[49] See *Senate Hearings*, p. 348.

[50] *Ibid.*, pp. 112 ff.

[51] U. S. Senate, Committee on Finance, 85th Cong., 2d Sess., *Report No. 1625, Part 2, Minority Views*, pp. 7-16.

[52] 42 LRR 326.

cial insurance implies a relationship between amount of benefit, its duration, and taxes paid. A temporary change undermines these standards without permanently improving the conditions which make the extension necessary. In this violation of insurance principles, the Mills-McCormack Bill was clearly worse than the administration measure, since it increased all durations by 16 weeks regardless of the worker's entitlement under state law, paid higher amounts to persons under the federal provisions than to workers still receiving payments from the state program, and financed all this by federal grant without condition that the state program be permanently improved.

Method of Financing

The effect of financing the extension by the method chosen, 4-year interest-free loans to be repaid by raising the federal unemployment tax after January 1963 if repayment has not yet occurred, also has led to controversy. In the first place, the administration never agreed that loans were involved. They viewed the matter as a straight-forward use of the federal taxing powers.[53] But, especially under an optional program, it is clear that the taxes will not be applied equally to the states. Some states pay more than others, for the amounts expended will vary where the program is used and will be nonexistent for jurisdictions not agreeing to the temporary extension.

This argument of unequal taxation often was advanced as a reason why states would not enter an optional program. It also was argued that states which chose to aid their hard-hit citizens would be penalized by higher taxes

than those paid by states which left their benefit exhaustees to fend for themselves.[54]

Business groups feared that the program would undermine experience rating by requiring repayment through uniform federal unemployment tax increases on all employers in the state.[55] (In the eyes of these observers the bills proposing financing by grant were worse still, since the revenue would presumably be raised by general taxation.) Indeed, Secretary Mitchell conceded that experience rating would not enter in the repayment plan, though he argued that it was inappropriate since experience rating never existed in the federal tax.[56]

But it appears to this writer that one of the most interesting features of the Administration bill and of the act actually passed is that it makes possible some experience rating in the federal area. If the states do not repay the federal monies, it is true that repayment will be made through a uniformly increased federal unemployment tax levied against all employers. If, however, the state chooses to repay from state funds, as it may, and recoup the amounts paid from state unemployment tax revenue, then the possibility arises that through experience rating some employers will pay proportionately higher shares (as percentages of payroll) toward repaying the federal monies than will others. If it further had followed that the state had no option about participation in the emergency program as the original bill provided, the possibility of widespread

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[53] See, for example, *House Hearings*, p. 41.

[54] Statement of William L. Batt, Jr., *Senate Hearings*, p. 378.

[55] See statements for Wisconsin Manufacturers Association and National Association of Manufacturers, *Senate Hearings*, pp. 249, ff., p. 345.

[56] *House Hearings*, pp. 40 ff.

experience rating in the federal program might have arisen and now does exist in the state under the program.

Extension of Benefits

Every major bill extended duration of benefits, but only one would have made the change permanent. As between the House bills, both administration-backed bills provided for variable durations of extended benefits approximately 50 per cent as long as payment rights under the act under which benefits were exhausted. But the Mills-McCormack and Ways and Means Committee Bills provided for approximately 16 weeks of added benefits, regardless of entitlements under state statutes. Of the two methods of setting the maximum extension period, considering that neither was true to the contributory principle, the variable duration which is in the final act seems preferable. Under automatic extension for 16 weeks, some workers with marginal labor force attachment who were eligible for only a few weeks benefits under their state law might get benefits for more weeks than they had worked in the base period.

Amounts of Benefits

Only 2 bills proposed to alter amounts of benefits, one permanently and the other temporarily, and only for recipients of the federally-extended benefits. Both intended to use the formula recommended by President Eisenhower in his 1958 *Economic Report*. It would provide benefits of 50 per cent of the worker's average weekly wage up to a maximum of two-thirds of the state average weekly wage in covered employment. Since agreement on the inadequacy of present benefit levels is widespread and since the formula chosen is minimal, it appears that inclusion of

this provision was sound in a bill for permanent changes. However, since federal beneficiaries would have received different amounts under the Administration proposal than those still drawing benefits from the states, and since the status quo ante is to be reestablished after any of the temporary bills expires, it might be argued that failure to alter the amount of benefits is appropriate in a temporary bill.

Coverage

Only the Ways and Means Committee bill proposed to alter coverage. This proposal was irresponsible, proposing to pay 16 weeks of benefits to persons who had never been covered by unemployment insurance if they could prove that they worked enough in the base period to meet eligibility requirements. Senators Douglas and Kerr recommended some sort of public assistance for these unemployed, but recognized that they could not now be covered as proposed.[57]

Conclusion

The bill which was passed failed to capitalize on the opportunity of a decade to meet some of the important shortcomings in social insurance. It provides temporary extension of durations. But it does not turn to the areas where a great measure of agreement exists as to what is to be done—coverage, benefits, and permanent extension of uniform duration of benefits. Nor does it touch the problems of increasingly stringent eligibility and disqualification rules. It avoids the questions of better financing through reinsurance or other methods.

It was probably appropriate that all these problems were avoided in this temporary bill. Apparently there was no

[57] Senate, *Report No. 1625*, Part 2, p. 23.

intent to deal with the insurance short-
comings of the system. Rather, the pur-
pose was to provide temporary assist-
ance, which was undoubtedly necessary,
but which, in the opinion of many stu-
dents of social insurance, should not
have been granted through the unem-
ployment-insurance system. If the Ken-
nedy-McCarthy bill could not be passed,
should any bill on unemployment insur-
ance have been enacted? Might the un-
employment-insurance system and the
contributory principle not be sounder if
the 1958 act had not been enacted?

The need for major improvement still
remains. The argument is often ad-
vanced against federal minimum stand-
ards that such standards would inter-
fere with state rights and powers. But
such interference would not really be
new. Federal compulsion started the

system in the first place through the
tax-offset device. Minima, such as the
" labor standard " and administrative
standards, have always existed. The
gains in coverage that occurred have
been spurred by the federal government.
Further action remains to be taken and
though such federal minima do further
restrict state powers, they seem justi-
fied, since in their absence many de-
sirable changes will not occur. Their
imposition would not create a new kind
of invasion of states rights, but would
simply extend a process in use from the
inception of the unemployment-insur-
ance program. As already suggested,
S. 3244 seems to this writer to be the
proper model for future improvement
in the program. Need another reces-
sion occur before it is undertaken?

REVENUE ESTIMATION AND STATE FISCAL MANAGEMENT

EUGENE A. MYERS *

Introduction

UNTIL recently, revenue estimation as a specialized function was neglected in the state budget-making process. This omission is explained in part by the fact that prior to 1930 the states, in large measure, were primarily law-enacting and law-enforcing agencies. Because their expenditures were modest, revenue demands were not pressing. The bulk of their revenues was derived from property taxes, some business taxes, and licenses—levies relatively stable in yield. Furthermore, tools and techniques for revenue estimating did not exist, data were inadequate, and the literature on the subject had not been organized and systematized. Except in a very few states, such as Illinois, California, and New York, revenue estimates were not considered as an integral part of the state financial plan.

The developments in the past thirty years, however, have made revenue estimating as a specialized function essential. State and local spending has risen steadily, amounting to $47 billion in 1957—an amount more than a third larger than federal outlays for non-defense programs.[1] In the process, the states have greatly broadened their functions. They now finance, in considerable part, the three most costly civil functions—education, highways, and public welfare. These three functions accounted for about two-thirds of states' expenditures for the year 1957. State payments to local governments as State aids totalled $7.3 billion in this same year.

These huge expenditures have required a considerable change in the character of most state tax systems and forced the widespread adoption of commodity taxes, income taxes on individuals and corporations, and certain special business levies.[2] The yields of these taxes are highly sensitive to changes in general economic conditions. In times of recession, the states, particularly those highly industrialized, could experience huge deficits which complicate state financing. Thus, the greater emphasis on revenue estimation.

Furthermore, the states are faced with the necessity of making long-range financial plans, especially with respect to capital projects. Adequate revenue estimates are thus essential if the states are to provide a sound basis for

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[1] Federal Reserve Bank of New York, "The Expanding Role of State and Local Governments in the National Economy," *Monthly Review*, June, 1957, p. 74.

[2] This is illustrated by the fact that in the fiscal year 1958, the 48 states derived more than 75 per cent of their total tax revenues from the following sources: 58.6 per cent of total taxes from levies on commodities and gross receipts and 17.2 per cent from levies on individual and corporate incomes combined. U.S. Bureau of Census, *State Tax Collections in 1958.*

their long-range forecasts of revenue abilities.[3]

In the period following the second World War, the states have been faced with rapidly rising expenditures and shrinking surpluses.[4] The decisions to raise taxes, expand services, or borrow, depend upon the level of revenue yields. Budgetary difficulties are involved if there is a serious error in the estimates of these revenue yields. Yet, there has been neglect of the revenue-estimating function, together with the necessary continuous tax research to support it. This can be illustrated by the fact that within the past fifteen years numerous states have found it necessary to employ special "tax study committees," "emergency tax committees," and "outside consultants," to determine with some accuracy the states' financial status, the tax potential, and the yield of proposed tax structures.[5]

The changing attitude of the states can be illustrated by New York State's experience in budget planning. Revenue estimation was recognized as essential to sound state governmental planning in the middle 1930's, when some states were in the midst of financial crises and faced with substantial deficits. In some cases, such as in New York, the General Assembly became dissatisfied with the revenue estimates provided by the Governor. The General Assembly not only challenged the estimates as prepared by the Governor, but directed its special committees to investigate the fiscal situation and prepare revenue estimates of their own. Thus, legislative committees were forced into the business of revenue forecasting because of the serious dissatisfaction with existing governmental machinery for the purpose. The New York Legislative Committee characterized the situation as follows: "Nowhere in this State is there any single individual or agency charged by law with the specific duty of studying revenues, business statistics, and trends and changes in economic conditions, and of forecasting on a scientific basis the revenues which the State may reasonably expect to receive under existing or proposed taxes. We believe that such a continuous study is essential to sound State fiscal policies." [6] Eventually, revenue estimation was considered so significant a function in state fiscal planning in New York that the Constitutional Convention of 1938 required that the state budget should consist of a *complete financial plan*. The constitution further stipulated that a budget should contain a "complete plan of expenditures proposed to be made before the close of the ensuing fiscal year and all moneys and revenues estimated to be available therefor, together with an *explanation of the basis* of such estimates. . ." [7] This is in contrast to earlier executive-type budgets, conceived as a means of improving fiscal management, and related primarily to the expenditure side of the budget process.

Although the situation described above existed in New York two decades ago, a similar problem has arisen in numerous other states within the last five years. As in the New York case, legis-

[3] For long-range revenue forecasts based primarily upon personal-income payments see State of New York, *Report of the Temporary State Commission on Fiscal Affairs of State Government*, Feb. 15, 1954.

[4] Pennsylvania and Michigan are two outstanding examples.

[5] For example, the General Fund operations in Michigan have been plagued with a series of substantial deficits, reaching $65,341,209 on June 30, 1952.

[6] State of New York, *Report of the Joint Legislative Committee on State Fiscal Policies*, Legislative Doc. No. 41, Albany, 1938.

[7] New York State Constitution, Article VII, Section 2. Italics added.

lative committees have been largely responsible, though operating in an uncoordinated fashion, for the improvement in government fiscal and management operations, through their comprehensive investigations and fact-finding on which were based improved procedures and policies. As more states modernize their constitutions, it is to be hoped that they, too, will provide such overall fiscal planning by requiring attention to the revenue side of the budget process.

Factors Affecting Revenue Estimates

There are a number of factors and conditions which must be given consideration in estimating revenues.

1. *Length of the Fiscal Period.* At present 34 states operate with biennial budgets; the remaining are on an annual basis. The longer the fiscal period, the more difficulties are faced by revenue estimators. In the longer period there is, obviously, more opportunity for significant shifts in social and economic patterns and for changes in legislation affecting tax bases and yields.

2. *Changes in Federal and State Tax Legislation.* Federal and state tax changes must be anticipated and examined. For example, revisions in the federal income tax will directly affect the yield of income taxes in more than half the states, through the deduction of federal income taxes in the computation of state tax liabilities. Federal excise taxes and state sales taxes may also affect consumption patterns, hence the revenue estimator must take them into account.

3. *Efficiency of Tax Collections.* The efficiency of the tax-collection process has a direct influence on tax yields. An increase, quantitatively or qualitatively, in revenue-department staff, especially in research and auditing personnel, or a comprehensive field-audit program, greatly strengthen the entire tax administrative and collection process, and are productive of revenue. Michigan and California have had highly satisfactory results from their field-audit operations. For example, in the fiscal year 1956 Michigan uncovered $4.9 million in tax deficiencies through its Field Operations auditing program.[8] The California sales-tax-audit program resulted in the collection of approximately $10 million in additional revenue for the 1955-56 fiscal year. In the five year period, 1951-1956, the audit program resulted in recommended changes in tax liabilities of $55 million. After the deductions of cancelled liabilities and the costs of operating the audit program, the State collected a total of $24 million in additional revenues.[9]

4. *Shifts in Economic and Social Patterns.* Union-management relations should be considered periodically. The revenue estimator should note the expiration dates of major union-management contracts, especially those in the basic industries. Wage increases and the granting of liberal fringe provisions may substantially affect costs and prices, thus influencing the components of state incomes and revenues. The effects of industry-wide strikes, for example, are difficult to determine, but they nevertheless may significantly change the yield of sensitive taxes, such as those on corporate and personal income. For example, the California Department of Finance reports that General Fund receipts in the first six months of fiscal 1957 fell moderately below the budget

[8] Michigan Department of Revenue, *Annual Report, 1955-56.*

[9] California State Board of Equalization, *Annual Report, 1955-56,* pp. 23 ff.

estimates. Although general economic conditions were believed to affect the yield of most levies, a dispute over compensation of parimutuel personnel materially affected the receipts from horseracing. The dispute closed one racetrack for a month, and this factor accounted for essentially all of the errors in the estimate of the horseracing-license fees. The actual receipts were approximately 14 per cent less than the budget estimates.[10]

Similarly, a shift in car buying from big to small cars could influence gross sales and consequently receipts of sales taxes. While it takes time and effort to detect shifts in our pattern of living, they are sufficiently important to revenue yields to command the estimator's attention.

5. *Maturity of the Tax.* It is easier to obtain accurate estimates of yield for a tax that has become well established in the system than for a levy which is a new one. In estimating the revenue from a new tax, the estimator must recognize that it may not be effectively administered or enforced during the first few years of operation. Some taxpayers may not be acquainted with the requirements of the act, and, therefore, compliance may be poor. Furthermore, if the act provides numerous exemptions and special provisions, controversies concerning tax liabilities may impede proper collections. In some cases, the estimator may be able to check the estimates of a new levy against the yield of a similar levy which has become well established in another jurisdiction.

6. *General Economic Conditions and the Attitude of the Estimator.* Although revenue estimating has scientific foundations, it remains an art which is

substantially influenced by the character and ability of the estimator. If he has a strong reason to favor a particular estimate, the figures are likely to be biased in that direction. Revenue estimates are based primarily upon business forecasts, and they therefore will be influenced by the tendency of the estimator to be conservative or over-optimistic with respect to the business outlook. The estimator, furthermore, is influenced by the attitudes and requirements of his superiors in the administrative and legislative branches of his jurisdiction. He may be conservative in his estimates in order to justify partially some tax increases; or optimistic in order to forestall tax increases.[11]

Revenue estimation cannot perform its proper role in fiscal management unless the estimator is permitted complete objectivity in his analyses. The administrative and legislative branches of government must have faith in and respect for the revenue estimator, rather than have the revenue estimates based upon the attitudes and policies of either of these branches of government. In practice as well as in theory, the revenue estimator should provide the policy-making branch of government with the facts which he determines are the most appropriate in terms of his findings, rather than with a set of conclusions that the policy branch may want.

Methods of Revenue Estimating Used in the States

1. As late as 1952, most of the states were still using some rule of thumb in estimating revenues. Usually there is

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[10] California Department of Finance, *Memorandum,* January 14, 1958.

[11] For an appraisal of revenue estimating on the Federal level, see: Roy Blough, *The Federal Taxing Process* (New York: Prentice-Hall, Inc., 1952) pp. 299 ff.

some variation on the use of recent historical data. For example, estimates may be based on the last fiscal year, or an average of several years, with crude adjustments made in these results depending on trends or intuition. Actually, the basis is experience, trust, and belief in the past. Personal judgment and prejudices may provide considerable weight in this type of forecasting.

This method was perhaps justified in past periods when state tax yields had built-in stability, but with the addition of cycle-sensitive taxes, such as income and sales taxes, estimating has become more difficult and has required improved techniques as well as more comprehensive information. But even then, the successful revenue estimator must possess the ability to identify correctly significant changes in economic and social trends. The difficulties faced by revenue estimators today are emphasized, for example, in the current Annual Report of the Michigan Department of Revenue, as follows:

> The Department has always been aware of the dangers inherent in attempting to predict future state revenues. The techniques involved go far beyond the realm of crystal ball gazing or a resort to clairvoyance. Since Michigan relies to a great extent on the automobile industry for its prosperity, any change in the car buying habits of the public will have a corresponding effect on the state's tax economy. This is quite evident in the fact that the sales tax on automobiles was only $1.3 million greater in fiscal 1956 than in fiscal 1955 but has shown as high an increase as $12 million in other years. These were the years immediately after World War II when the demand for new cars was tremendous. In contrast to this the sales tax on automobiles dropped nearly $5 million in 1952 over 1951, probably due to an increased demand for steel used

in defense contracts as a result of the Korean War. . . . In connection with the forecasting of future revenues from combined sales and use taxes, it is interesting to note that the Department's Annual Report for 1943-44 stated, after certain qualifications, that " revenues in excess of ninety millions of dollars annually from these sources are not impossible." This year [twelve years later] combined sales and use taxes were $327 million. As this Annual Report goes to press (November, 1956) the federal government has announced that the cost of living has hit a new all time high, one of the major automobile companies has increased the price of its 1957 models from 7.4 per cent, employment is up, and economists look for a good year in 1957. These factors all point to higher tax collections but these same higher prices will require more taxes to run the state government. Conditions which could have an effect on state taxes are the Federal Reserve Board's " tight money " policy, spasmodic warfare in the Middle East, the Anti-Communist uprisings in Central Europe, and increasing automation in industry. Another project which will have a decided effect on taxes is the federal government's $33 billion program for building interstate highways. This program, initiated by the Federal Highway Act, will span a 13-year period and may have both good and bad effects on Michigan taxes. The huge amount of money pumped into the economic stream by the federal government will definitely help to increase the general prosperity but there is no way of determining in advance, for example, how much steel, cement, and other road building materials will be diverted from the home construction industry. The new highways will naturally result in more highway travel which in turn will cause a greater demand for products of Michigan's auto industry. New roads will also stimulate Michigan's tourist trade. Michigan taxpayers can well expect to pay more federal taxes for these new roads

but Michigan itself will derive no taxes from the actual materials that go into its share of the new highways. All of these factors, plus many others, make revenue predicting hazardous, to say the least." [12]

2. Another technique is to determine trends from the compilation and analysis of significant economic data. These data include economic series prepared by private agencies and government units, such as national income, personal income, consumption and investment expenditures, population trends, industry and crop data, size of the labor force, price indexes and retail sales. The estimator may select the economic series which would most likely influence the tax yields and then chart the trends. The estimator may, in some cases, make his tax levy comparable to another state and test the economic series by applying the same principle and compare the results.

A more formal procedure for analysis of trend is the correlation method used by California, Illinois, and perhaps few other states. Briefly, this method involves the estimation of revenues from an equation reflecting the past relationship between tax yields and various economic series. First, however, the estimator must make a choice based on observation of the relationship existing between the tax base and the economic indicator or series. Illinois has found a close relationship between its retailers' occupation tax collections and the national disposable income. California also uses the regression equation to estimate its sales-tax revenues. Whatever economic series or indicators are used depends largely on the fit one finds between the tax base and the series. This varies from state to state and from one tax base to another. Estimators usually find the answer by trying several series or indicators. [13]

3. A different method based on a questionnaire to a sample of firms has been successfully used by California and New York for estimating corporate-income taxes. California uses a sample of 400 corporations representing 63 industry classifications, while New York uses a sample of 600 corporations representing 30 industry classifications. Wisconsin analyzes data from the 200 largest corporations which account for approximately one-half of the total tax yields. In this method, taxpayers are requested to compare their anticipated tax liabilities with the amount of taxes paid in the current year. The estimates obtained from the questionnaire method may be checked against various economic series. In this case, some states have found a close relationship between fluctuations in national corporate profits before taxes and corporate taxable income. Special tax investigating committees have found the above methods satisfactory, even for analyses made during so-called "emergency conditions." [14]

Recent Developments

At present, there is considerable interest in the improvement of the expenditure side of state budgets as evidenced by the trend toward the adoption of performance-type budgets. But overall fiscal planning in the states requires adequate attention to the revenue side of the budget as well. Revenue estimation is a necessary tool of fiscal management, and this function must be properly financed and implemented.

[12] Michigan Department of Revenue, *Annual Report*, 1955-56, p. 17.

[13] J. W. Huston, "Estimating a Sales Tax," *Memorandum*, Illinois Department of Finance, 1951.

[14] See: Pennsylvania Emergency Tax and Revenue Fact-Finding Committee, *Report*, December, 1951.

Considerable progress has been made since 1946 with respect to the exchange of information and techniques of revenue estimation between the officers of various states. In October, 1946, tax-research economists from several states, the Departments of Commerce and Agriculture, the Federal Reserve Board, and certain trade associations met in Chicago under the auspices of the Federation of Tax Administrators. The group discussed the general business outlook for 1947, various economic factors affecting the economy, and techniques of estimating specific taxes. Annual meetings of this group have been held since 1946 and it is known as the Research Section of the National Association of Tax Administrators. This group made a further contribution in 1956 by explaining the estimating methods in use in certain states and setting forth these techniques in a manual.[15] This manual represents the first attempt to formalize the methods of revenue estimation and organize the significant data which are necessary to carry out these functions.

Conclusion

In conclusion, it is our belief that a sound revenue-estimating system in a state government should include the following:

(1) The Division of the Budget should be responsible for the preparation of the final revenue estimates;

(2) The Division of the Budget should also maintain a systematic estimating process;

(3) There should be within the Budget Division (or within a Division closely associated with the Budget process such as the Department of Finance or Administration) a research unit for the conduct of this work, together with the continuous development of comprehensive statistical records and estimating techniques;

(4) The tax-collecting agencies should maintain an adequate organization for the preparation of primary revenue estimates;

(5) The Budget Division should make a review and analysis of preliminary estimates jointly with independent tax economists and fiscal experts;

(6) The budget document should contain an explanation of the revenue estimates together with the economic assumptions upon which they were based;

(7) Records of current revenue estimates should be preserved for review and analysis by future estimators;

(8) A continuous analysis and review should be made of trends in economic patterns within the state and nation.

[15] Federation of Tax Administrators, *Revenue Estimating: A Study of Procedures and Techniques for Estimating Tax Revenues*, 1956. See also the following excellent studies: Robert S. Herman, *Revenue Estimating in the New York State Government* (State of New York, Budget Division, 1952); Jesse Burkhead, *Government Budgeting* (New York: John Wiley & Sons, 1956); and Blough, *op. cit.*

SOME ASPECTS OF EQUALIZING EDUCATIONAL OPPORTUNITY AND TAXATION BURDEN

DALE L. BOLTON *

EQUALIZATION of educational opportunity and taxation burden has come to be generally accepted as one of the goals of a state system of financing public schools through grants-in-aid. The discussion which follows presents some of the reasons why equalization is important and some of the methods by which its existence may be determined. Empirical evidence related to the equalization of educational opportunity and taxation burden in the state of Wisconsin has been drawn upon to illustrate more explicitly the generalizations made concerning this subject.

I. *Need for Equalization*

General objectives for taxation policy have been expanded since Adam Smith's era, but the original maxims of equality, convenience, certainty, and economy are still often quoted. It is probable that more controversy has arisen over the one concerned with equity than any other. It is likewise this principle of equity that is most closely related to grants-in-aid, since a corollary to taxation in accordance with ability to pay is disbursement according to need. The nature of this relationship is exemplified by the effect which each has on allocation of resources: while the ability-to-pay principle equalizes resources as a result of the means of collection, the grant-in-aid has the same effect when distributed in accordance with need.

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This reallocation of economic resources is accomplished by any grant-in-aid which disburses funds according to need; but where the grant-in-aid is used for educational purposes, it has other economic effects which are by nature more long-range. These effects determine whether each pupil will have the opportunity to develop his potential according to his own capacity or whether his educational opportunities will be regulated by the financial ability of his parents or the community in which he resides. Equal educational opportunity is promoted when provisions are made for a "foundation" or "basic" educational program whereby all pupils of a state are allowed the opportunity to develop their abilities and talents. This equalization of educational opportunity, besides having salient educational features, has a tendency to redistribute future economic production according to developed potential of individual pupils rather than according to the financial abilities of the parents or the local community.

Therefore, allocation of resources is affected in three ways by funds which are used for operation of schools: (1) the collection of local taxes and their expenditure on education, (2) the collection of state taxes, and (3) the disbursement of state taxes through grants-in-aid. If the local-taxation burden is equalized through a proportional tax on general property, the equalizing effect of school funds on allocation of re-

sources is determined by the equity of the means of collection of the state tax and the equalization of educational opportunity brought about by the grant-in-aid. It follows, then, that the determination of the equalization of educational opportunity and local-taxation burdens should afford information concerning the redistributional effects of the disbursement of grants-in-aid.

II. *Methods for Determining Equalization*

Definitions. In order to determine the amount of equalization of educational opportunity and taxation burden, operational definitions must be established which will allow measurement.

Educational opportunity is measured by expenditure per weighted average daily attendance (with high school pupils weighed heavier than elementary pupils) where current expenses, exclusive of capital outlay, transportation, and debt service, are considered. Educational opportunity must be related to some measurable quantity for comparative purposes. In order that opportunities may be provided, services must be rendered and goods must be furnished. These goods and services cost money; therefore, some crude comparisons may be made by means of expenditures for goods and services. Moreover, even if expenditures measured opportunities, two schools which spend three hundred thousand dollars each during a school year would not necessarily offer the same opportunities: one may have an enrollment of five hundred while the other may have an enrollment of one thousand. Therefore, it is necessary to make comparisons on the basis of expenditure per unit of educational need, where the number of pupils attending

school is a rough measure of the need for educational services.

When *equalization* of educational opportunities is referred to in the remainder of this discussion, it will mean that situation in which local authorities have been provided with the means whereby equal educational services may be provided. Whether identical services are offered is irrelevant, since the goal is to provide equivalent opportunity for local development according to local needs within the decentralized structure of state responsibility.

Financial burden of education is considered to mean the ratio of taxes paid (levy) by a local school district to the equalized valuation of that district. Adjustment needs to be made to both the numerator and the denominator of this ratio, however, because the state determines the effective ability of the district by guaranteeing a certain equalized valuation per pupil, and because comparisons have been made on the burden of current expenses only. Consequently, the financial burden of the local district has been measured by the ratio of net operating cost for current operation to the guaranteed valuation. The resulting ratio is referred to as the *required full value mill rate*.

III. *A Deductive Analysis*

A deductive analysis of the methods for distributing general grants-in-aid to school districts will determine whether equalization occurs in a state. This analysis may be made by examining a basic equalization formula and comparing it with other allocation formula(s) in use.[1] This procedure will not allow quantification of the equalization,

[1] Since the empirical data to be presented is from the state of Wisconsin, the formulas analyzed will also be those in use in Wisconsin.

but it will provide a rationalization of any quantification which may follow as well as provide a basis for future changes.

A basic equalization formula utilizes a standard minimum level of expenditure per unit of service which is assured through the combined support of the central and local governments. It also provides for a uniform minimum burden (ratio of revenues to resources) among local districts to provide local contributions to the support of the standard minimum program. This assumes that local effort may be exercised beyond the required minimum.

The level of expenditure per unit of service and the burden of local districts are usually measured in terms of an expenditure per average daily attendance (ADA) and a full-value mill rate. A basic equalization formula for distributing funds to a single district would be:

$$(1) \qquad A_i = uN_i - rC_i$$

where A_i = the amount of state grants-in-aid to the ith local governmental unit,

u = standard minimum expenditure per ADA,

N_i = number of pupils in ADA,

r = the uniform minimum full-value mill rate for all districts, and

C_i = the equalized valuation of the local school district.

If there are other sources of local revenue than the property tax, the formula may be modified as follows:

$$(1A) \qquad A_i = uN_i - rC_i - R_i$$

where R_i = receipts from sources other than property taxes and state aids.

The difference between a flat-aid formula and an equalization-aid formula is that the former does not require a minimum contribution toward education from the local district. In this case

$r = O$ and formula (1) becomes:

$$(2) \qquad A_i = uN_i$$

The formulas utilized by Wisconsin are modifications of these basic formulas. For example, when funds are disbursed to integrated (or unified) aid districts which have grades $1-12$, the statute requires that the state disburse these funds to each district according to the formula:

$$(3) \qquad A_i = (28,000 N_i - C_i) r_i$$

where r_i is the full-value mill rate for a local district. The full-value mill rate utilized for computation of aids for the school year 1958-59 is determined by dividing the net current operating cost of a district, as recorded in the 1957-58 annual report, by its guaranteed valuation. The guaranteed valuation is $28,000 times the 1957-58 resident ADA. The net current operating cost is found by adding the cost of current operation and maintenance to the transportation costs and then subtracting current receipts (excluding state aids and general property tax revenue), transportation receipts, and high school non-resident aid from the state.

If the $28,000—the guaranteed equalized valuation per resident ADA—is given the symbol G, formula (3) will become:

$$(4) \quad A_i = (GN_i - C_i) r_i = Gr_iN_i - r_iC_i$$

A comparison may now be made between (4) and the basic equalization formula (1).

The basic difference between the two formulas is the lack of a standard minimum expenditure level, u, in formula (4). There is a fluctuation in Gr_i, the amount comparable to u, according to the mill rate determined by the local community; therefore, Gr_i is not a constant but a variable. This is sometimes

considered as an incentive element of the formula to induce districts to levy higher mill rates in order to receive greater aids. This means, however, that the qualified voters of a school district, by determining the operating expenditures and the consequent levy rate, can determine the amount of aid to be received from revenues collected from the state at large. The eventual effect, then, of allowing the expenditure level per unit of need to vary according to the mill rate levied within the district is to allow the people of a district to have indirect control over the amount of state funds which they receive.[2]

The above description of distribution of state aids does not apply to all integrated aid districts, however, since some districts receive " flat-aid " grants. Some districts receive more funds if computed on the basis of $35 per elementary resident ADA and $44 per high school resident ADA than by the equalization formula. Therefore, they may accept the larger amount.[3] This may be expressed

as:

$$(5) \qquad A_1 = u(X_1 + 1.257 Y_1)$$

where X_1 is the elementary resident ADA and Y_1 is the high-school resident ADA in a particular district. In this case $(X + 1.257Y)$ compares to the N in the flat-aid formula (2). It does not compare to the N in formula (4) used in Wisconsin, however, since it weighs high school ADA heavier than elementary ADA. This means the equalization-aid formula used in Wisconsin utilizes a different measure of need from that utilized by the flat-aid formula. This difference between the measures of need utilized in the two methods of distribution should be eliminated if neutral treatment is to be given to all districts.

If formula (4) is compared with formula (5), it is readily apparent that the flat-aid districts receive no extra funds for an increase in mill rate. Whereas the equalization-aid districts have a certain degree of control over the amount of funds they receive from revenues collected from the entire state, the flat-aid districts have no such control. Likewise, the flat-aid districts have no incentive to vote for an increase in expenditures and the accompanying increase in mill rate in order to receive greater aids.

This deductive analysis of the methods for distributing general grants-in-aid to school districts has attempted to show how equalization may be affected by the methods of distribution. In Wisconsin we have seen that grants-in-aid for school purposes are disbursed by two methods: (1) a *modified* equalization formula which utilizes a variable expenditure level per unit of need, and (2) a flat-aid formula which uses a different measure of need from that used in the equalization formula. The

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[2] However, since r_1 also enters negatively in the formula, an increase in r_1 will result in larger aid only if the guaranteed valuation (GN_1) exceeds the property valuation, C_1, that is, only for the poorer districts. In the case of the richer districts, the reverse is true.

[3] The constants $35 and $44 and the constant $28,000 in formula (3) determine the total amount of funds granted to all districts and therefore establish the proportion of school funds to be furnished by the state. This proportion is quite variable among the states as indicated by a range of 6.3 per cent in Nebraska to 85.6 per cent in Delaware with an average of 41.4 per cent. Figures for 1953-54 indicate that at that time ten states reported more than 60 per cent of school revenue was derived from state sources.

Eight states derived less than 20 per cent from state sources. Wisconsin is in this category. Clayton D. Hutchins and Albert R. Munse, *Public School Finance Programs in the United States* (Washington: U. S. Department of Health, Education, and Welfare, Misc. Bulletin No. 22, 1955), pp. 12-15. The general trend among states is for increases in the proportion of aid coming from state sources, but such is not the case in Wisconsin where the proportion generally ranges between 15 to 20 per cent.
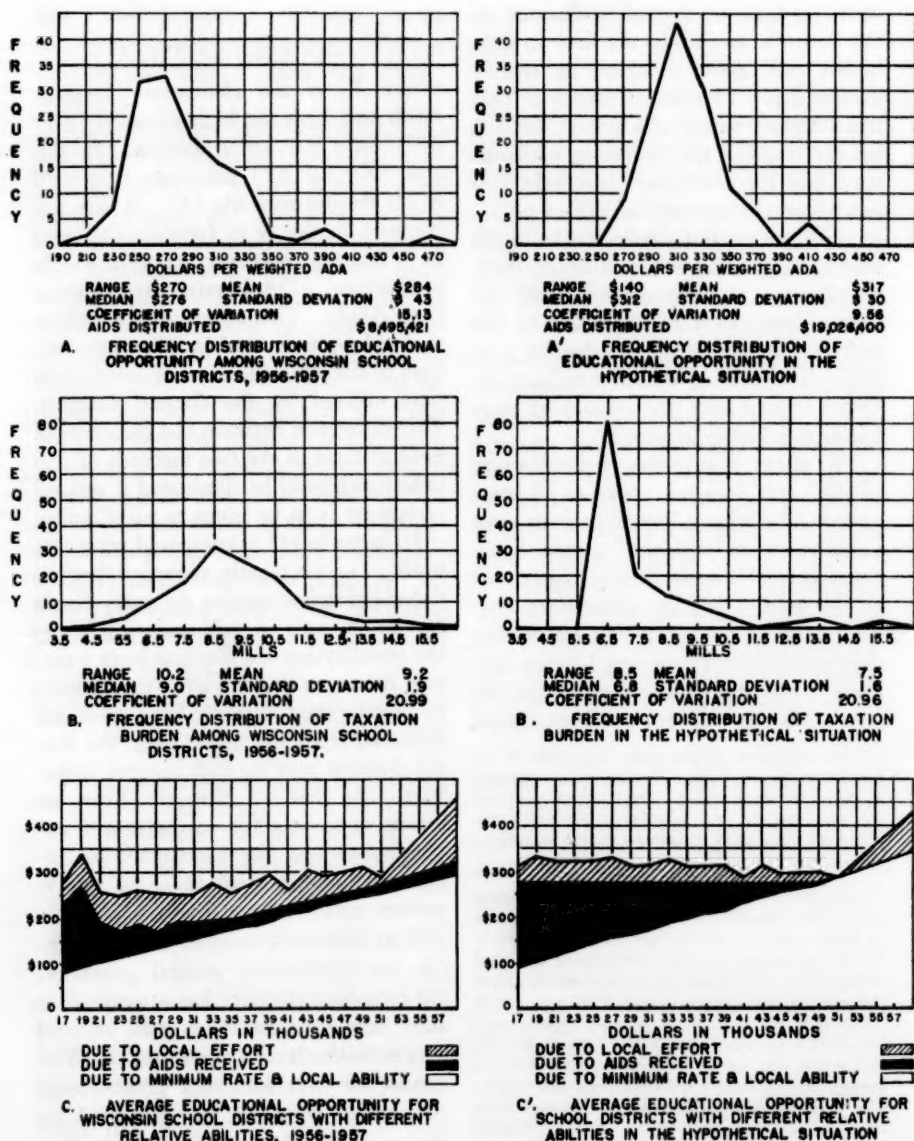
FIGURE 1   EDUCATIONAL OPPORTUNITY AND TAXATION BURDEN IN
WISCONSIN SCHOOLS IN 1956-1957 COMPARED WITH EDUCATIONAL
OPPORTUNITY AND TAXATION BURDEN IN THE HYPOTHETICAL
SITUATION WHERE STATE AIDS WERE DISTRIBUTED
BY THE FORMULA $A_i = u N_i - r C_i - R_i$
($r = 6.5$ MILLS, $u = \$278.38$)

use of these two formulas results in un-neutral treatment of districts in terms of control over state funds, incentive to increase expenditures, and measure of need.

IV. *Some Empirical Evidence*

Now that some reasons for equalization of educational opportunity and taxation burden have been discussed and some methods for determining the amount of equalization which exists have been presented, the reporting of some empirical evidence should be meaningful. This evidence will concern 131 Wisconsin school districts whose high school ADA ranged between 250 and 2500. All of these districts offered grades 1-12 and were chosen for study because of their relative homogeneity of organization and current operation expenditure per ADA. The data presented is for the 1956-57 school year. The amount of equalization of educational opportunity and taxation burden will be compared to a hypothetical situation which was conceived in order to determine what the amount of equalization *could* have been under other assumed conditions if a different distribution plan had been used.

The method of distribution in the hypothetical plan was based on an equalization formula of the type of (1A) above. The standard minimum amount to be expended per pupil, u, was determined as the average expenditure per pupil in those districts which were neither seriously handicapped nor unduly favored by ability to support education. This average expenditure was found to be $278.38.

The minimum full-value mill rate, r, was determined as the rate which was necessary for a " key " district to maintain the standard minimum expenditure per pupil when it received the amount of state aids which it received in 1956-57. This " key " district was not the most able district, but one which was closer to average ability than the most able district. The rate necessary for this district to maintain the standard minimum expenditure per pupil was found to be 6.5 mills.

Having determined u and r and made the assumption that N_1, C_1, and R_1 remain the same as the 1956-57 quantities for each district, it is now possible to calculate and compare the results of the hypothetical plan of distribution with 1956-57 distribution of grants-in-aid. This comparison is shown graphically in the figure.

The frequency distribution of educational opportunity is shown in part A and part A'. The frequency distribution of local taxation burden is shown in part B and part B'. These distributions, with the accompanying descriptive measures of mean, median, standard deviation, and coefficient of variation, allow the amount of variation which existed in educational opportunity and taxation burden in 1956-57 to be compared with the amount of variation which would exist under the hypothetical situation.

Part C of the figure illustrates the average educational opportunity available for districts at various ability levels under the actual 1956-57 conditions. Part C' illustrates the average educational opportunity which would be available under the hypothetical conditions for districts at various ability levels. The different ability levels were chosen by taking equal intervals of $2,-000 in the measure of ability. Means were then computed for the districts within each interval on the measure of educational opportunity. The educa-

tional opportunity at each ability level was also divided into three portions which represent: (1) the educational opportunity which would be provided if no aids were received and if the minimum mill rate (6.5 mills) were levied, (2) the additional educational opportunity provided by state aids, and (3) the additional educational opportunity due to the local effort of the districts (the excess of the mill rate over 6.5).

The sum of portions (1) and (2) represents the "foundations" or "basic" program. It is assumed that the same mill rate would be continued in the hypothetical for those above the minimum as was carried out in 1956-57. An examination of part C of the figure reveals that the educational opportunity available from such a basic program was not equalized in 1956-57, and that some of the more able districts were aided as much as some of the poorer districts. However, an examination of part C' reveals that the basic program provided equal educational opportunity for all districts which had less than the equivalent equalized valuation of $49,000 and that none of the more able districts were aided as much as any of the poorer districts.

It is concluded from the results illustrated in the figure that in the hypothetical situation there would be more equalization of educational opportunity and of taxation burden.

In order to accomplish this equalizing effect, approximately 2.2 times as much money would be needed for grants-in-aid for the districts studied. An average increase from $284 to $317 in educational opportunity would occur as a result of these increased funds, and no school would spend less than $278 per pupil.

In general, it may be concluded that if funds were distributed to these 131 districts by means of an equalization formula which used objective methods for determining the standard minimum educational opportunity and minimum taxation burden, then approximately 2.2 times as much money would be needed for grants-in-aid, and a higher level of educational opportunity, a lower full-value mill rate, less variation in both educational opportunity and taxation burden, and greater equity of distribution would result. All of this could occur within a decentralized framework of administration which would allow local initiative beyond the minimum requirements through utilization of the available tax-leeway.

However, an alternative plan of this type would require increased state revenue. It is not the intent of this discussion to probe the relative merits of various tax sources. It is sufficient to say that it would probably be necessary to obtain these funds from the use of an income tax or a retail-sales tax, or both. The other large producer of revenue, the property tax, would probably be eliminated from consideration as a source for increased grants-in-aid to schools because one of the purposes of grants-in-aid is to relieve the burden on local property taxes.

Both the income tax and the retail-sales tax have advantages and disadvantages, and neither of them is ideally suited for providing the additional revenue needed for increased aid for schools. Therefore, any solution to the problem of where additional revenues are to be obtained must involve a reconciliation of the purposes of grants-in-aid with practical political problems and should not allow a consideration of economic

effects of the collection of a tax to obscure the economic effects of the expenditure of this revenue. The expenditure of funds through grants-in-aid to schools has an effect on both the production and the distribution of wealth and income. The people of a state should not become so engrossed in the problems of tax collection that a stalemate occurs and adverse economic effects result because of inadequate provisions for educational opportunity.

TAX RELIEF FOR NEW INDUSTRIES IN GHANA

ALAN H. SMITH *

THE practice of giving subsidies to new industries by relieving them wholly or partly from income tax in their early years is fast becoming a popular expedient in underdeveloped countries. After its introduction in Puerto Rico it was quickly adopted, with some modifications, in several of the British West Indian territories, spread to Nigeria and Ghana in 1952 and has recently been adopted by Malaya and Sarawak. The purpose of this article is to examine critically the form of the relief adopted in Ghana.

The British colony of the Gold Coast became an independent sovereign country within the British Commonwealth under the name of Ghana on March 6, 1957. Its growing political importance is matched by the rapid pace of its economic development and the Ghana government has taken several steps to demonstrate its sincere desire to welcome the foreign investment on which the further economic development of the country must in large measure depend. One of the most important of these steps is to provide for a wide measure of relief from income tax for new industries. And in judging the significance of this relief it must be remembered that there has been a large measure of participation in the government by the local inhabitants, under the leadership of the present Prime Minister, Dr. Kwame Nkrumah,

since 1951, and that since 1954 the government has consisted of an all-African Cabinet of Ministers with Dr. Kwame Nkrumah at its head.

In 1952 the Ghana [1] Income Tax Ordinance was amended by the addition of new provisions [2] providing tax relief for " pioneer companies." The first qualification for a company to receive the relief is that it shall be " resident " in Ghana, which means that it must be a company " the control and management of whose business are exercised in Ghana," [3] i.e., irrespective of the country of incorporation. It is such residence which, in general, establishes liability to tax in Great Britain for profits earned abroad, [4] and in view of the preponderance of British companies, and of companies established under tax systems similar to the British, operating in Ghana, there would be little, if any, point in giving relief to nonresident companies, which would bear another, and probably higher, tax on the same profits.

The first step towards granting relief is a decision that a particular industry is a " pioneer industry." This decision is

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[1] The name " Ghana " is used here throughout, including references to legislation passed before independence, although present prints of old legislation still contain the name " Gold Coast."

[2] Section 27 and the Fourth Schedule of the Income Tax Ordinance 1943, as revised and reprinted to include all amendments up to December 31, 1952. Section references in this article are to this Ordinance, unless the contrary is indicated.

[3] Section 2.

[4] U. K. Income Tax Act 1952, section 122, Sch. D, para. 1 (a) (ii).

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made by the government, i.e. the Cabinet of Ministers, according to certain principles laid down in the Ordinance. The main principle is that the industry " is not being carried on in Ghana on a scale adequate to the economic needs of Ghana and . . . there is . . . favorable prospect for further development," [5] but regard may also be had to the location of the industry, presumably on the grounds that because of regional differences it may be more desirable to encourage economic development in one part of the country than another. The declaration of an industry as pioneer is accompanied by the declaration of a specific product of that industry as a pioneer product, thus demarcating the sphere of relief more precisely as covering a particular industry producing a particular product. Declarations may be revoked at any time. Clearly if several companies start to carry on what was a pioneer industry, the latter may cease to be pioneer when its increased output becomes " adequate to the economic needs of Ghana." But any revocation will not disturb any relief status actually given to companies in that industry.

Orders declaring industries to be pioneer must be published in the *Ghana Gazette* and opportunities given for objections (e.g., from those who may be already carrying on an industry sought to be declared pioneer) and for such objections to be considered before an order is made.

The next step is for a company which wishes to carry on a declared pioneer industry to be certified as a pioneer company. This certification is made by the Minister of Finance, but with the prior approval of the government, i.e.,

the Cabinet of Ministers which makes pioneer-industry declarations must also approve pioneer-company certifications, in which, however, the initiative rests with the Minister of Finance. There are no special tests laid down in the Ordinance and there is no restriction of the relief to one company, no creation of a tax-supported monopoly. It is just laid down that the Minister *may* grant a certificate " if he is satisfied that it is in the public interest so to do, and in particular having regard to the production or anticipated production of such product from all sources of production in Ghana." The granting of the certificate is based upon an application by the company stating the production date, i.e. the date by which the company expects to produce *in marketable quantities* the pioneer product, the estimated rate of production by that date and certain other particulars, e.g., the capital expenditure to be made, that may well be a factor in deciding whether relief is to be given. When the production date arrives, the certified company must give a statement of the rate of production it has actually attained and of the cause of any shortfall from the estimated rate. The Minister has power to substitute another production date or, in case of default, to cancel the certificate.[6]

Companies carrying on a pioneer industry and certified to be pioneer companies enjoy tax relief during the " tax holiday period," which lasts for a maximum of five years. When granting the pioneer certificate, the extent of the relief is indicated: it may be *up to* total relief from tax for *up to* five years. It is entirely a matter of discretion whether the maximum relief, in point

[5] Fourth Schedule, para. 2 (1).

[6] Fourth Schedule, paras. 3 and 4.

of time or of amount, is granted.[7]

The relief is effective from the day on which the pioneer business starts for income-tax purposes, or from the production date, whichever is earlier. The two dates may be the same, but complications may arise if they are different, especially when it is remembered that the production date is basically an *anticipated* date. A company would certainly try to avoid having the production date occurring before the date of commencement for tax purposes, since in that case some period of the relief would be lost, and in such a case it would ask the Minister to substitute a different production date. The question of when a business starts for income tax purposes can be a very difficult one, but in view of the wording of the Ordinance it seems likely that the Ghana courts would follow British decisions, of which the leading one [8] decided that a company commenced business when the installation of its plant was complete and it began to receive raw material for the purpose of manufacturing it into the finished product. This clearly may be some time before a company starts to produce its product " in marketable quantities."

Powers are taken to prevent manipulation of profits to maximize relief. The Commissioner of Income Tax may direct that any expenses incurred within twelve months after the end of the holiday period and " which might reasonably and properly have been expected to have been incurred, in the normal course of business, during the tax holiday period " shall be treated as

expenses of the holiday period. But the reverse applies, too: if expenses which would normally have been incurred after the holiday period have been anticipated and actually incurred during that period, they may be related forward and charged against taxable, instead of tax-exempt profits.[9]

Losses incurred during the holiday period are set primarily against any profits made at any time during that period. Any balance of losses for the period as a whole is then carried forward and set against future taxable profits, the time limit of fifteen years for business loss allowances [10] running from the end of the holiday period.[11]

The Ghana Income Tax Ordinance provides for an accelerated system of allowances in respect of capital expenditure.[12] In the first year of the expenditure there is given both an " initial allowance " (40 per cent on plant, 20 per cent on mining expenditure and 10 per cent on buildings) and an " annual allowance " (10 per cent on buildings and a rate for other assets depending upon their estimated life, with a minimum of 15 per cent for mining expenditure), both being based upon full cost. In later years the same rate of annual allowance is given, but based upon the reducing balance of expenditure, with provisions to limit total allowances to cost less what is realized on final disposal of the asset. Where an asset is entirely used up in the holiday period, no problem arises: the total net capital expenditure is a proper charge against exempt profits. But

[7] Fourth Schedule, para. 5.

[8] Birmingham and District Cattle By-Products Co. Ltd. v. Commissioners of Inland Revenue, (1919) 12 Tax Cases 92.

[9] Fourth Schedule, para. 6 (f).

[10] Section 20 (2) (b) as amended by the Income Tax (Amendment) Ordinance 1955.

[11] Fourth Schedule, para. 6 (e).

[12] Third Schedule.

where the asset continues in use beyond that period, the effect of the large allowances in the early years would be to allocate an unduly large proportion of the depreciation allowances against exempt profits. It is therefore provided that where assets continue in use beyond the holiday period, the allowances shall be calculated as if the assets had been acquired immediately after the end of the period, so that those allowances will be given in full against taxable income. This is a very notable addition to the relief, since it will mean that in many cases more than five years' profits will be exempted. The distinction between assets used up before and after the end of the period is logical, but arbitrary: it puts a somewhat heavy premium on deferring actual disposal of the asset until the holiday period is over and it may pay a business man to do just that even at the cost of some drop in efficiency or output.[13]

It will be many years before it will be possible to judge how far pioneer relief is effective in stimulating the economic development of Ghana. But some judgment of probability can be made now in the light of general principles and of the indications given so far of the way in which the Ghana government intends to make use of the relief.

The income tax as now found in most countries is based on certain well-known and accepted principles. It is a tax on income and the criterion of lia-

bility to that tax is simply the existence of the income. The nature of the income is irrelevant to the imposition of the tax. It does not matter whether the activities which produce the income are desirable or not, or whether they are activities which the state should encourage or discourage or to which the state should remain neutral: in fact in many systems the illegality or immorality of income-producing activities does not prevent their being taxed. To hold otherwise is to deny the principle of ability to pay: and to deny that principle is not only to remove the accepted ethical basis of the tax, but also in consequence to weaken the likely cooperation of taxpayers on which the administration of any income tax system must to some extent depend.

The concept of the tax as nondiscriminatory and based on ability to pay is under continuous attack. Special interests seeking help from the state have found in many countries that they receive a more sympathetic hearing when they ask not for direct financial aid, but for relief from taxation, especially income taxation. There is a common tendency in some political circles to shun resolutely the open subsidy but to be prepared to toy with the possibility of the hidden tax subsidy. Yet if a government should see fit to subsidize an activity, it is far preferable that it should do so openly and frankly, imposing such conditions and methods of control as it thinks fit, rather than that it should give the subsidy without control or restriction and hidden away in the complex procedures of income-tax assessment.

The ethical and practical objections to the attempted forwarding of state policy by means of selective income-

[13] Fourth Schedule, para. 6 (c). The importance of this provision may be gauged by the fact that Professor and Mrs. J. R. Hicks strongly recommended against the introduction of tax holiday relief in Jamaica purely on the grounds that accelerated depreciation would nullify its effect, or at least make the effect uncertain or hazardous. J. R. and U. K. Hicks, *Report on Finance and Taxation in Jamaica* (Government Printer, Kingston, Jamaica, 1955), para. 170.

tax reliefs apply with particular force to pioneer-industry relief. For while this subsidy is apparently subject to detailed control, inasmuch as it is only given to companies who make out a proven case for it, in practice it will probably have to be given in a more broadcast manner. A business organization seeking to establish a new industry in a country granting pioneer-tax relief will obviously do all that it can to stipulate that it shall be given that relief: and the government will hardly, if ever, be in position to deny the relief on the grounds that the industry would be sufficiently attractive and profitable without it. One may reasonably suppose that the relief will be granted more or less automatically when the industry is in substance a new one. The loss of revenue which would otherwise have been received if the relief had been granted in a more selective manner may not be inconsiderable for a small country.

The point of revenue loss needs to be stressed, since it is of more importance than might appear at first glance. Any underdeveloped country must be prepared to make some sacrifices to have its resources developed and it might seem attractive to sacrifice not what the country already has—by devoting a high part of current income to savings —but only a part of what the country will receive in the future, the higher taxation yield from a more developed economy. But in fact this revenue loss comes about in a way which may prove embarrassing and positively slow up the rate of economic progress. A fundamental problem of an underdeveloped country is that it has to incur a large amount of capital expenditures, and they in turn may involve it in increased annual expenditure before sub-

stantial industrialization can take place. The establishment of an industry presupposes a certain basic development, the provision of roads, schools, hospitals, sanitation, water, electricity and other services. This development must normally be undertaken by the government. The government may have financial reserves and other resources to finance that development. But still it will involve extra expenditure on maintenance every year, permanent extra expenditure which will call for permanent extra revenue and the only reliable source for that extra revenue is the revenue which will result from substantial industrialization.

An illustrative example is that of education. Rapid industrialization presupposes a sound level of education without which there will not be an adequate supply of skilled artisans, office workers and other employees needed in an industrial economy. But raising the level of education is a long process and while that process is taking place there is a heavy annual bill for teachers' salaries and other educational costs.

Where is the extra money to come from to pay these costs? In countries where the general standard of living is well above the minimum of subsistence, the money can be found by increased taxation, but there are very severe limits to this in a country where so many of the inhabitants are little above that minimum, if not actually below it. Since World War II most underdeveloped countries have managed to solve this problem by steeply increased taxation on agricultural exports, whose world prices boomed in the postwar years. But these prices have receded, often very substantially, and at the least it is safe to say that no extra taxation can be counted on from

this source. Since it is permanent annual expenditure that has to be financed, the only proper course is to finance it out of permanent and stable revenue. Taxation of agricultural export proceeds is not, beyond a certain minimum yield, productive of stable revenue and by now most underdeveloped countries have increased other forms of taxation to somewhere near the maximum that can be borne.

Ultimately the source of financing must be the increased economic activity for which basic governmental development paves the way. The problem may thus be reduced to that of financing the period which must intervene between basic economic development and industrialization. Some extra revenue will be available as development proceeds and the money paid out finds its way into consumer goods which can be taxed. But this will not be a large factor, especially in major development schemes where so great a part of the cost is likely to be incurred abroad. The difficulties of financing will not be overcome until the industry is established and in full operation, and the principal source of extra revenue must be the taxation of the profits of the industry.

The dangers of pioneer relief can now be clearly seen. It increases the gap between basic development and the only reliable source of financing the annual costs of that development. An addition of five years to what may be an embarrassingly long period of time can only aggravate one of the most important problems facing countries that are trying to develop their economy.

And, of course, this may not be the end. Once a breach has been made in the principle of nondiscrimination, it is hard to see where the process will stop. Already there have been many suggestions that five years is not enough and that the tax-holiday period should be extended; no doubt we shall hear more of these suggestions. The relief has been introduced in many countries simply because it has been given by other countries and, in a capital-hungry world, the period of the relief may be extended for the same competitive reasons, thus aggravating the difficulties of underdeveloped countries still further.

There are other vital objections to pioneer tax relief. Perhaps the most important one is that the main doubt facing a prospective new industry in an underdeveloped country is whether it will make a profit at all; and pioneer tax relief can do nothing at all to resolve that doubt. It cannot help those who are not making a profit; it can only help the enterprise which is prospering. It will help some who do not really need its help at all, and it will not help certain industries which may be of permanent benefit to a country but which make no profit in their early stages. To that extent, it will fail in its primary objective.

This " hit-or-miss " characteristic of the Ghana relief could to some extent be alleviated by linking it not to a period of time but to the capital investment involved. In some countries the length of the holiday period depends upon the capital invested in the business. Thus in Nigeria [14] the holiday period is two years; but this is extended by one further year if £15,000 is invested or by three further years (making in this case five years in all) if £100,000 is invested. Of course the permissive powers in the

[14] By the Nigerian Aid to Pioneer Industries Ordinance 1952, section 12.

Ghana Ordinance under which the relief is granted for *up to* five years could be used to achieve the same result, but it may be doubted whether this would result in any substantial improvement.

The suggestion which is now advanced is that the relief should be tied to the amount of the capital investment *without any limitation of the period of time at all.* If a person wants to invest a large sum in a business which is pioneer in nature, there is much to be said for the view that he should be allowed to make tax-free profits up to the amount which he invests in the country, whether he does this in one, five or twenty years.[15] The more profitable businesses would then make an earlier contribution to the country's revenue needs and the more doubtful and risky businesses would be more encouraged since they would have a greater likelihood of receiving full relief, however slow might be the build-up of profits. This amendment would not be the sort of extension of relief that has been commented upon unfavorably above: it would be an extension for those who need it, but a restriction of relief for those who did not need the relief so much. If, however, any further relief were thought desirable, then pioneer relief on the present lines—straight relief for a specified number of years—could be given after the invested capital had been recovered. Such relief need not be total relief: it could be partial relief, or relief limiting the tax rate to a specified amount, thus giving some protection, even if only temporarily, against a possible tempta-

tion to increase tax rates on business enterprises which had proved to be profitable.

Farther than this pioneer tax relief can hardly go: it can certainly do nothing for a business which makes no profit and possibly there is no reason why such a business should be subsidized. Pioneer relief is limited by the very fact that it is an income-tax relief. But even assuming this, it is still of interest to look at such indications as the Ghana government has given of the way in which it intends to use the relief to promote economic development.

The Ghana government has fortunately at its disposal a very valuable and realistic report on industrialization made a few years ago by Professor W. A. Lewis, Professor of Economics at Manchester University and at present Economic Adviser to the Ghana government.[16] The report contains a very clear statement of the principles which determine the possible industrialization of an underdeveloped country, and consideration of those principles is essential to a determination of what means can be used by a government to promote industrialization. Those who are interested in this vital problem are recommended to study the report in detail.

The Lewis Report offers ground for believing that some progress can be made in the development of manufacture for the home market and the report contains a detailed review of the different industries which can be started, grading them as favorable, unfavorable or marginal. It is of interest to compare these gradings with the orders so far made declaring industries and products to be

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[15] Of course it may be desirable to impose some limitation to prevent a business whose prospects of success have become doubtful prolonging its life unduly, but the period limited should be a very long one, to allow normal businesses plenty of time to recover their investment.

[16] W. A. Lewis, *Report on Industrialisation and the Gold Coast* (Accra: Government Printing Department, 1953).

pioneer.[17] These are set out in Table I which shows the pioneer industry in the first column, the pioneer product of that industry in the second column, and the grading of that industry by Professor Lewis in the third column.[18]

tion into industrialization possibilities. Thus is will be seen that the Orders cover two industries thought by Professor Lewis at the time of his report to have unfavorable prospects. It will also be noted that they cover several indus-

TABLE I

Pioneer industry	Pioneer product	Grading in Lewis Report
Biscuit mfr.	Biscuits	Marginal
Canning of food	Canned fruit, vegetables, meat and other foodstuffs	Favorable (fruit and vegetables only until local market develops)
Cement mfr.	Cement and by-products	Favorable
Concrete prefabrication	Concrete building and structural elements	Not mentioned
Confectionery mfr.	Confectionery	Marginal
Earthenware building materials mfr.	Bricks, tiles and glazed pipes	Favorable
Fertilizer mfr.	Fertilizer and by-products	Not mentioned
Footwear mfr.	Boots and shoes	Marginal
Foundry products mfr.	Light sections in mild steel, reinforcing wires and bars, etc.	Marginal
Industrial gases mfr.	Oxygen and acetylene	Not mentioned
Leather products mfr.	Leather goods	Not mentioned
Match mfr.	Matches	Favorable (if local timber usable)
Metal nail mfr.	Metal nails	Not mentioned
Metal products mfr.	Metal hollow-ware, furniture, fitments, vehicle bodies, etc.	Not mentioned
Metal screw mfr.	Metal screws, nuts and bolts	Not mentioned
Oil (vegetable) expressing and refining	Crude and refined oil	Favorable
Paper mfr.	Paper	Unfavorable (until cheap method found of using tropical hardwoods)
Radio set assembly	Radio sets	Not mentioned
Soap mfr.	Soap and by-products	Marginal
Synthetic resin, mfr. of articles from	Household and toilet articles	Not mentioned
Tobacco products mfr.	Cigarettes, cigars, snuff and cheroots	Marginal
Tanning	Leather	Not mentioned
Wheaten flour milling	Wheaten flour and by-products	Unfavorable
Woodwaste products	Synthetic boards, briquettes, etc.	Not mentioned

Some divergence has inevitably arisen. The Orders were made several years after the Lewis Report, when there has been time for more thorough investiga-

tries that he did not mention. At the same time, the Orders so far made do not cover the following industries which he recommended:

(a) Those with favorable prospects—the manufacture of beer, salt, glass, lime, industrial alcohol, miscellaneous chemicals and wood products;

(b) Those with marginal prospects—the manufacture of hats and caps, shirts,

[17] These Orders have been published at various times in the *Ghana Gazette* as Legal Notices Nos. 384/1955, 64/1957, 153/1957, 154/1957, 224/1957 and 44/1958.

[18] The description of the industry varies in some cases between the orders and the report, but the correspondence is sufficiently close for present purposes.

knitwear, weaving cotton and rayon, jute bags, candles, paints and colors, fibreboard travelling bags, and rubber manufactures.

It is known that all the recommendations in the report are subject to continuous consideration and it seems likely that some of these industries will in due course be declared pioneer. Despite some divergencies in detail, it is clear that the Ghana government is following the principles of the Lewis Report and is very willing to give pioneer-relief status to any possible new industry.

This fact is in itself of considerable significance. Although the younger countries are much given to making statements about their willingness to see foreigners investing with them, they are far less ready to take concrete steps to demonstrate that willingness. And it may well be that herein lies the real value and meaning of pioneer tax relief. Whatever may be its theoretical limitations, it is in practice a contributing factor to the creation of a favorable climate for foreign investment: the psychological effects of the relief may be sufficient to justify it. Of course, many other acts are necessary before foreign investment can be attracted, such as guarantees against expropriation, limitations on exchange control, and so on. But Ghana has in fact given many public guarantees as to the fair treatment of foreign investors. Against this background, the existence of her pioneer income-tax relief and the manner in which it is being operated are sufficient to demonstrate her sincere desire to do all in her power to encourage foreign investment so essential to her future economic development.

COUNTERCYCLICAL ROLE OF STATE AND LOCAL GOVERNMENTS

JAMES A. MAXWELL *

I

IN THE June, 1958, issue of the *National Tax Journal*, Ansel M. Sharp[1] makes some statements concerning the fiscal role of state and local governments during the 1930's which are, I think, misleading. He is critical of the " general proposition " that these governments pursued policies which intensified the depression. Such a proposition, he says, " may not be in complete conformity with their actual behavior " (p. 141). This wary statement is borne out by one conclusion with which I agree: the countercyclical performance of *state* finances was pretty good, at least up to 1933. But, in my opinion, the emphasis of the Sharp article is wrong, and so is his interpretation of certain statistics.

I start with the question of how *intergovernmental payments*, mostly grants-in-aid, are to be treated.[2] If we are satisfied with a set figure of *total* spending by all levels of government, the appropriate procedure is to show, for each level, the amount of expenditure on a gross basis, and then to deduct intergovernmental expenditure to secure a set *total* figure. While this solves the aggregate problem of double counting, it leaves unsolved the problem of allocation of the grant spending to a specific *level* of government. Should a federal grant to the states be counted *net* as a federal or as a state expenditure? Should a state grant to local governments be counted *net* as a state or as a local expenditure? Since grants grew rapidly during the 1930's, the decision is of statistical consequence. The usual practice has been, in effect, to treat grants as expenditure of the donor government. To avoid double counting, federal grants to the states are deducted from the aggregate figure of state spending; thereby securing a figure of *net* state spending; and similarly a figure of *net* local spending is secured by deducting state and federal grants to local governments. Mr. Sharp deviates from this procedure in a curious way: he deducts

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[1] Ansel M. Sharp, " The Counter-Cyclical Fiscal Role of State Governments During the 'Thirties," *National Tax Journal*, XI (June, 1958), pp. 138-45.

[2] While the argument to be developed does not depend upon what federal expenditure should be counted as an intergovernmental payment, the issue may be raised here. In *Historical Statistics in State and Local Government Finances, 1902-53* (Washington: United States Department of Commerce, Bureau of the Census, 1955) " those federal programs that aid State and local governments, but which are administered directly by the Federal Government are excluded " as grants (p. 7); i.e., they are counted as federal spending. CWA was one; WPA was another (except that " sponsor " contributions from state and local governments counted as state and local spending). Yet the effect of these programs was to lift direct financial burdens from state-local budgets because the payments were for state-local functions in which the Federal

Government had no direct interest. Federal grants, however, are for specific functions in which there is a federal interest.

In these pages, the practice of *Historical Statistics* will be followed. But in my *Federal Grants and the Business Cycle* (New York: National Bureau of Economic Research, Inc., 1952), I followed the Bureau of the Budget in treating such programs as CWA and WPA as emergency *grants*. The volume of *Historical Statistics* was not available when I wrote.

state grants from local expenditure,[3] but he does *not* deduct federal grants from state (and local) expenditure. Yet if a case can be made for counting federal grants as state (and local) expenditure, a parallel case can be made for counting state grants as local expenditure.

Mr. Sharp states that to count federal grants as federal expenditures, i.e., to deduct the grants from state expenditures, is to assume that " state spending would have decreased by the amount of the federal grants if these grants had not been forthcoming " (p. 145, footnote). This is, I believe, too narrow a formulation. Elimination of a federal grant might lead to a decrease in spending *greater* than the amount of the grant because some state spending had been induced by the grant; or it might lead the states to *increase* their spending in order to compensate for loss of the grant.[4] Apart from the practical question of how to avoid double counting, the issue arises of what level of government has the initiative and responsibility concerning the type and amount of the grants.[5] As my Table I shows, federal

[3] Mr. Sharp presents *all* the statistics of state and local spending, and of federal and state grants, so that a reader can find figures of state (local) spending inclusive or exclusive of federal (state) grants. His argument, however, hangs upon the procedure which I describe.

[4] This last is implied by the Sharp procedure.

[5] If consideration is given to the effect of grants on national income, the issue becomes more complicated because expenditure for purchase of goods and services is recognized to be different from expenditure for transfers. The Office of Business Economics of the Commerce Department presents quarterly figures of state and local purchases of goods and services (These are used in Part II of this note). Here federal grants, in so far as they are spent on goods and services, are counted as state and local spending because these governments make the purchases. For another procedure see the article by E. Cary Brown, " Fiscal Policy in the 'Thirties: A Reappraisal," *American Economic Review*, XLVI (December, 1956), p. 870.

grants 1930-32 were largely for purchase of goods and services, while for 1934 they were largely transfers. A decision to count grants as expenditure of the donor government does imply that it has the initiative concerning the type and the amount of the grants.

What *were* the federal grants 1930-34? In 1930, over 70 per cent of the modest sum of $114 million was for

TABLE I
FEDERAL GRANTS TO THE STATES, FISCAL YEARS 1930-34
(\$ millions)

	Total	Highways	Public welfare	Other
1930	\$114	\$ 80	\$ 1	\$ 33
1932	222	191	1	30
1934	968	225	459	284

Source: *Historical Statistics* for 1932 and 1934; Maxwell, *op. cit.*, p. 4 for 1930.

highways, and in 1932, when the total had doubled, all the expansion was concentrated in highway grants. The effort was to use public works spending as a stimulative device, and, in this effort, the initiative lay with the federal government. By 1934, federal grants had grown more than fourfold over 1932, most of the increase being for public welfare, specifically FERA.[6] While FERA was a grant program, the amount of the state or local contribution was left to the discretion of the administrator, Harry Hopkins, and, despite strenuous efforts, he had little success in securing state-local contributions. In 1934, over 70 per cent of FERA spending was federal money, with the states providing 14 per cent and localities 15 per cent. As a

[6] In fiscal 1934, the federal government also spent \$805 million on CWA. Most of the people put on the rolls of CWA, during its short life of less than one year, were transferred from the work-relief program of FERA. But CWA is not here counted as a grant program.

practical matter, federal grants for FERA should certainly be regarded as federal spending [7] and it seems reasonable to believe that the federal government had the initiative in all its grant expenditure.

What were the state grants 1930-34? Table II indicates that the major increase 1930-32 was for highways and 1932-34 for public welfare and education. The presumption is that the state governments took the initiative. Mr. Sharp, in developing his argument that state fiscal performance 1930-34 was somewhat countercyclical, treats state grants as state expenditure.[8]

TABLE II
STATE GRANTS TO LOCALITIES, FISCAL YEARS 1930-34
($ millions)

	Total	Education	Highways	Public welfare	Other
1930	$ 398 *	$368	$ 30	n.a.	n.a.
1932	801	398	229	$ 28	$146
1934	1,308	434	247	211	426

n.a.: Not available.
* Approximate.
Source: *Historical Statistics*, p. 19, for 1932 and 1934; *Financial Statistics of States*, 1930, for 1930.

Table III shows that *net* state spending was up 1930-32, and down 1932-34, while *net* local spending declined 1930-34. Total *net* state-local spending declined 1930-34, with the chief responsibility resting upon the local governments. Mr. Sharp's conclusion that state spending moved up 1932-34 depends upon the reckoning of federal

[7] In 1935-36, FERA was replaced by WPA. In the volume *Historical Statistics* wage and salary payments of WPA are counted as federal and only the modest "sponsor" payments as state and local expenditures.

[8] If state grants to local governments are to be deducted from local spending, so also should *federal* grants to localities. In his Table IV, Mr. Sharp appears to overlook this.

grants as state expenditures, as well as state grants as state expenditure.

Mr. Sharp presents state and local tax revenues as percentages of their total spending, concluding (p. 140) that these percentages stayed approximately the same 1930-34, while the state percentage declined. But his figures of spending contain the flaw indicated above. If the figures I suggest are used, the conclusions must be that, while the percentage which state and local tax revenues are of total *net* spending remained the same 1930-32, it rose sharply 1932-34; and that the state percentage also rose 1932-34. In any case, Mr. Sharp's as-

TABLE III
NET STATE AND LOCAL SPENDING, FISCAL YEARS 1930-34
($ millions)

	1930	1932	1934
Total	$8,979	$8,171	$6,791
State	2,177	2,607	2,493
Local	6,802	5,564	4,298

Source: See Table II.

sumption that decline of state tax revenues in relation to state spending was countercyclical is very questionable. States increased many of their tax *rates*, 1930-34, and turned to regressive taxes.

Mr. Sharp points out that " state governments added to their outstanding debt every year during the 1930-33 depression. . . . Only in one year, the first year of recovery (1934) did local debt decline significantly " (pp. 142-43). But these facts do not upset the argument that state-local debt policy was perverse. In the 1920's, state-local net debt increased annually by more than $1 billion. After 1931, their net borrowing dwindled to less than one-fifth of this annual rate, and such a marked shrinkage surely intensified the depression.

II

The effects of the three postwar recessions on state-local finances are not readily discernible. The aggregate annual figures of spending, revenue, and borrowing march steadily upward. *Annual* figures are, indeed, quite unsatisfactory for the purpose in hand because the duration of each of the recessions was brief and because the state-local yearly aggregates are for an imprecise year. For forty-four state governments, the fiscal year in 1957 [9] ended June 30, while that of the other four states was as follows:

> Alabama, September 30
> New York, March 31
> Pennsylvania, May 31
> Texas, August 31

For local governments, the variation is extensive, and the only generalization ventured is that, in the *majority* of cases, the fiscal year and the calendar coincide.[10] This dispersion obviously blurs whatever impact a short recession may have on fiscal year figures. Even figures of capital outlays, which might be expected to reflect cyclical influences, were insensitive. As Table IV shows, they move upward with merely a slight hesitation in 1950-52, attributable to the Korean War. Obviously, series with a smaller time-period are indicated and two such series will be examined.

As part of the national-income and gross-national-product series, the Office of Business Economics has constructed *quarterly* figures of state and local government purchases of goods and serv-

[9] Greater variation existed earlier.

[10] Cities over 25,000 population have fiscal years ending in every month except November, although more than half have fiscal years ending either December 31 or June 30.

ices.[11] When these are refined by elimination of trend and seasonal, they show (Table V) *some* countercyclical tendencies. Thus in the fourth quarter of 1948, the figures turn up, moving down only in the fourth quarter of 1949. An upturn occurs in the third quarter of 1953, coinciding with the beginning of the recession, although recovery in late 1954 did not bring a downturn in state-local purchases. Finally, the fourth

TABLE IV
STATE AND LOCAL GOVERNMENT CAPITAL OUTLAYS 1948-57

($ millions)

	State	Local	Total	481 cities with population over 25,000 in 1950
1948	$1,425	n.a.	n.a.	$ 912
1949	1,827	n.a.	n.a.	1,314 *
1950	2,242	n.a.	n.a.	1,483
1951	2,506	n.a.	n.a.	1,412
1952	2,658	$4,778	$ 7,436	1,493
1953	2,847	5,058	7,905	1,691
1954	3,347	5,778	9,125	1,920
1955	3,992	6,713	10,706	2,038
1956	4,564	6,843	11,407	2,126
1957	5,518	7,481	12,639	2,454

* Estimated.
n.a.: Not available.
Sources: United States Department of Commerce, Bureau of the Census, *Summary of Governmental Finances*, 1952-57; *Compendium of State Government Finances*, 1948-51; *Compendium of City Government Finances*, 1948-56.

quarter of 1957 shows a sharp upturn in the figures.

The Social Security Administration

[11] The relation between the figures of state and local government expenditures and revenues as presented in the Census and in the National Income Statistics is explained in the 1951 National Income Supplement to the *Survey of Current Business*, pp. 130-36; also Bureau of the Census, *Summary of Governmental Finances in 1952*. The largest single item of difference is that, while Census statistics include, on a gross basis, the receipts and expenditures of publicly-owned enterprises, in the income statistics these are excluded, being treated as a part of the business sector of the economy.

in the *Social Security Bulletin* offers monthly figures of expenditure on public assistance. Here the figures of general assistance would be expected to show cycle-sensitivity. General assistance is the catch-all public-assistance program, and it is financed wholly by the state-local governments without federal grants. The series has a strong seasonal pattern. When this is removed, some cyclical influences can be seen (Table VI). In the autumn of 1948, the upswing in general assistance expenditure accelerated. This upswing continued beyond the bottom of the reces-

Thus, in the postwar years, the insurance programs have been expanded in coverage and liberalized in benefits. Most employables who fall out of employment now receive unemployment benefits; most persons over sixty-five years of age who retire from the labor market are now entitled to retirement benefits. In 1950, a fourth grant program—for the permanently and totally disabled—was added to the three established categories of old-age assistance, dependent children, and the blind. This lifted from state and local budgets a slice of their expenditure for general assistance.

TABLE V

RELATIVES OF STATE AND LOCAL GOVERNMENT PURCHASES OF GOODS AND
SERVICES BY QUARTERS, 1947–57

(Adjusted for seasonal and for trend)

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
I	98.4	99.3	103.0	103.2	100.0	97.4	96.4	96.4	99.3	100.0	105.2	106.3
II	98.0	99.7	103.2	100.3	100.7	97.7	94.0	97.3	99.8	100.8	103.9	....
III	97.7	101.3	103.4	100.0	99.5	95.9	94.3	98.6	99.0	101.2	100.3	....
IV	99.6	100.9	103.0	99.8	98.0	95.8	95.3	98.5	98.8	102.5	105.8	....

sion in October 1949. The onset of recession in the fall of 1953 brought an upturn of general assistance spending, and again this continued at a high level beyond the bottom turning-point of August 1954. The onset of recession in September 1957 coincided with an upturn in general-assistance spending which was still rising in April 1958.

It should be noted that the general-assistance program has been affected by important postwar changes in the federal welfare program which are immeasurable. These changes [12] have made general assistance a declining category of public assistance both in number of recipients and expenditure since 1949-50.

[12] They have probably affected seasonality, so that the pattern has not been stable.

At present, recipients of general assistance embrace a static group, consisting of unemployables under the age of sixty-five years, and a variable group of employables who, while entitled to unemployment benefits, fall on general assistance during the waiting period, or after exhaustion of their unemployment benefits. This is at least part of the reason why spending for general assistance continues at a high level for some months beyond the bottom of a recession.

*   *   *   *   *

The postwar record, as well as the record 1930-31, indicates that, in a moderate downturn of economic activity, state and local finances operate somewhat countercyclically; they do *not* follow the swings of private business ac-

tivity. Most of the countercyclical force arises on the spending side, and the spending is stable rather than ideally expansionary in recession and contractionary in boom. But the performance is *not* perverse.

The opinion that state-local finances are cyclically perverse stems from their actual perversity during the deep de-

have been even more severe.

What is the limit of a downswing in economic activity to which the response of state-local finances is countercyclical? No answer can be given beyond the vague statement that it is greater than has been experienced postwar and less than 1930-33. While current opinion appears to regard a deep depression as

TABLE VI

General Assistance Expenditures Seasonally Adjusted, Monthly 1947-58

($ millions)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1947	12.6	14.4	12.0	12.8	13.6	13.9	14.4	14.2	14.5	15.0	14.8	15.6
1948	15.1	15.2	15.6	16.1	16.2	16.6	16.6	16.5	17.1	17.2	17.8	19.4
1949	n.a.	20.0	21.4	21.6	22.1	23.2	23.4	24.6	25.0	25.5	28.8	29.1
1950	27.6	28.0	29.2	27.6	26.4	25.5	24.1	23.5	22.6	19.6	19.4	19.8
1951	18.8	17.8	17.1	16.6	16.2	15.9	15.4	15.5	15.0	15.3	15.3	15.6
1952	15.1	14.5	14.0	14.1	14.1	14.2	15.8	14.4	13.9	13.9	13.6	14.4
1953	13.5	12.6	12.3	12.4	12.4	12.6	12.4	12.1	12.3	12.3	12.5	14.0
1954	14.1	14.5	15.0	15.5	15.5	16.2	16.5	16.9	17.7	18.0	18.7	20.7
1955	19.8	19.5	19.3	18.7	18.0	17.6	17.0	16.7	16.5	16.2	16.7	17.8
1956	17.0	16.8	16.3	16.3	16.1	15.9	15.9	17.0	15.7	16.3	16.6	17.6
1957	17.9	17.3	16.9	17.3	17.3	16.9	17.2	17.2	17.3	18.3	18.7	21.2
1958	22.3	22.9	24.2	25.9								

n.a. = not available.

Sources: Social Security Yearbook, and Social Security Bulletin for the unadjusted figures. A seasonal adjustment was made by means of the summation method (aggregating the figures for each month, and expressing them as relatives of the yearly average). The seasonal index, beginning in January is: 106, 110, 114, 107, 100, 95, 94, 94, 93, 94, 95, 97.

pression of the 1930's. In the early stage, 1930-31, the record shows that state-local spending expanded. But as depression continued and deepened, first the local governments, and then most state governments, cut back on spending for almost every function except public welfare. Had it not been for the vast expansion of federal spending, especially by grants, the cut-back would

unlikely, prudence would indicate that the countercyclical strength of state-local finances be extended by such devices as reserves to stabilize taxes and borrowing, grants-in-aid, and appropriate debt management.[13]

[13] Such a program for a state is presented by the Temporary Commission on the Fiscal Affairs of State Government, *A Program for Continued Progress in Fiscal Management* (Albany, 1955) Volume One, Part One, Chapter 10; Volume Two, Staff Reports 6 and 7.

VETERAN TAX EXEMPTION IN WYOMING

FRED W. BENNION *

THE veteran tax exemption was first authorized in Wyoming in 1917 when the legislature exempted $2,000 in assessed valuation of real and personal property owned by Civil War veterans. By amendments in 1921 and 1935 a similar exemption was granted Spanish-American War, World War I, Indian Wars, the Filipino Insurrection, the Boxer Rebellion, and the Puerto Rico campaign veterans. The exemption was also extended to widows of veterans and World War I nurses.

Under the statutes a nonresident property owner could not receive the benefit, but any veteran moving into the state could qualify. When World War II veterans and their widows were included in 1945, an amendment provided that the veteran must have been a bonafide resident of Wyoming at the time of his entry into the service. Nonresident veterans of prior wars could come into the state and qualify thus creating an inequity in the application of the law. In 1953, Wyoming veterans of the Korean War, and their widows, were granted the exemption with the same residence requirement affecting World War II veterans.

Local taxing jurisdictions are reimbursed by the state for taxes which are lost through the veteran exemption. Increasing heavy demands upon the state's general fund forced the legislature to act. In 1953 it charged the

Legislative Interim Committee " to study all tax exemptions, particularly homestead and veterans exemption, in an effort to eliminate the inequities of these exemptions, and to reduce the tax burden resulting from same, ... and to make specific remedial recommendations for repeal and modification of such exemption laws, and/or to provide additional revenue to pay the cost of such exemptions."

The 1955 Legislature did repeal or modify thirteen different tax exemptions. The homestead exemption of $500 in assessed valuation of real property of all persons occupying the same as a home was repealed outright.

The $2,000 assessed valuation veteran exemption was modified as follows: [1]

1. The exemption was declared to be a bonus for military service and a ceiling of $800 total tax benefit over a lifetime was placed on the exemption. (At the time of modification in 1955, some veterans had received total tax benefits in excess of $3,000.)

2. Set a qualifying residence date of prior to March 1, 1955 for veterans of all wars prior to World War II. World War II and Korean War veterans may file for exemption at any date if they were residents at time of entry in the service.

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* The author is Associate Director of the Tax Foundation of Hawaii.

[1] The points to follow explain in more detail the application of the Wyoming exemption law and may clarify footnote 28 of Table I in M. H. Spears, " Veterans' Property Tax Exemption," *National Tax Journal*, XI (June, 1958).

3. Widows are exempt $2,000 of assessed valuation during widowhood and the $800 tax benefit ceiling does not apply.

4. Disabled veterans with 100 per cent disability are entitled to exemption of $2,000 assessed valuation each year and are not limited by the $800 tax-benefit ceiling.

5. Veterans with less than 100 per cent disability are not limited by the $800 tax-benefit ceiling but rather are entitled each year to that percentage of a $2,000 assessed valuation exemption as their disability bears to 100 per cent. Ten per cent or less disability entitles the veteran to a 10 per cent of $2,000 assessed-valuation exemption.

The county assessors were given a year to compile the necessary data to learn the total amount of tax benefit each veteran had actually received in prior years. For example, if a veteran had received $760 in tax benefits prior to 1956 he was allowed $40 more and then his exemption was discontinued.

In 1955 it was conservatively estimated that there were over 51,000 veterans residing in the state or still in service. (Wyoming's total population at that date was about 300,000.) It was estimated that the amount of exempt veteran assessed valuation would reach a peak of $75,000,000, barring future wars, which on the basis of tax rates at that time meant a tax loss of $3,000,000 anuually. Under the new exemption, the tax loss will gradually disappear.

The table below shows the fiscal effect of the 1955 changes in the veteran exemption law:

	Amount of assessed valuation exempt	Total tax loss
1953	$22,978,000	$1,287,000
1954	23,935,000	1,397,000
1955	25,040,000	1,479,000
1956	17,157,000	1,078,000[2]
1957	15,947,000	1,066,000
1958	14,603,000	1,007,000

[2] Spears, in his article previously cited, used average tax rates to arrive at a computed tax loss of $655,000. The actual tax loss amounted to $1,078,000.

NTA NOTES

From the President

To have been elected President of the National Tax Association at its Annual Conference in Philadelphia is a distinct honor and a genuine pleasure. I know it will not be possible for me to equal the fine records established by many of our past presidents. I can only promise that I will do my best to meet the numerous and various responsibilities of this office.

In keeping with tradition, the Fifty-first Annual Conference of NTA just concluded in Philadelphia was outstanding. The interesting, timely, and worthwhile subjects on the program were handled masterfully by the capable participants. Attendance at all of the sessions was most gratifying. Credit for this outstanding program goes to the Chairman of the Program Committee, Lewis Kimmel, and the members of his Committee. Not to be outdone in any respect, the able Chairman of the Local Arrangements Committee, Ted Warner, and the members of his Committee went all out to plan and execute an array of events which will never be forgotten by those in attendance. The afternoon trip through Valley Forge, the evening social hour and dinner at the Valley Forge Academy, plus the band and glee club concert by the boys of the Academy were a surprise to all and most enjoyable. A truly remarkable added attraction! The City of Brotherly Love lived up to its historical reputation in every respect.

I wish to take this opportunity to solicit the aid and assistance of the NTA membership during the coming year.

> First, please take time from your busy schedules to let me have your suggestions for improving any of the services NTA now performs and also suggest any new services we might provide.
>
> Second, advise me of any criticisms you have as to our shortcomings.
>
> Third, make sure to retain your membership in NTA and, in addition, try to obtain new members.
>
> PLEASE USE THE APPLICATION CARD ATTACHED TO PAGE 382 FOR THIS PURPOSE

I know you will agree that our Quarterly Journal with its excellent articles is indispensable to taxpayers, their representatives, practitioners, tax administrators and those in the academic field. It is interesting to note that the articles appearing therein through the years have covered all phases of taxation and cannot be said to have related primarily to any specific or limited field. We owe a

continuing debt of gratitude and thanks to the contributors of these fine articles, as well as the Editor, E. Cary Brown, and his able assistant, Eleanor Hodges. Equal thanks goes to the members of the Editorial Advisory Board.

On behalf of the entire membership, and for myself personally, I wish to give special thanks and appreciation to the Chairman of each Study Committee and the members of such committees who have given unselfishly of their time and efforts for their fine contributions to the study of taxation and attendant subjects. I sincerely trust the chairman and members of existing study committees will continue to serve as well in the future as they have in the past.

Our recently established Harrisburg office, under the fine leadership of Walter Kress, Executive Director, has had its second full year of successful operation. Members are requested to take advantage of the many services now available by writing directly to Walter.

The results obtained during the past year while I served as Chairman of the Membership Committee were not as successful as I had hoped. While we retained approximately the same number of members, we lost some income due to the loss of several corporate members who paid higher annual rates than the new classes of members we obtained. During the present year Mr. Walter Walsh, our newly elected Vice President, will serve as Chairman of the Membership Committee and I earnestly urge every member of NTA to give him his utmost support and assistance in this undertaking.

Plans are in progress for the Fifty-second Annual Conference which is to be held in Houston, Texas, October 25-29, 1959, at the Rice Hotel. Developments will be furnished in the next issue of the Journal.

STANLEY J. BOWERS, *President*

* * * * *

From the Past President

To have served as President of the National Tax Association is indeed a great honor and I am deeply grateful to the members for making this experience possible. It has afforded me the opportunity to become acquainted with many of the finest people in the country. I am deeply grateful for the splendid assistance and cooperation which I have received during my term of office from countless individuals in the Association. With Stanley Bowers at the helm and with the continued assistance of numerous able people, I am confident that the Association will achieve outstanding success in the year ahead.

H. KENNETH ALLEN, *Past President*

From the Executive Director

President Bowers has commended the Philadelphia Conference. Your Executive Director seconds the motion, so to speak. There was a general atmosphere of hearty approval of all phases of the gathering. The program and the entertainment were both on the highest plane. No praise can be too great for the superior performance of Lew Kimmel, the Program Chairman, and Ted Warner, the Local Arrangements Chairman. They worked together effectively to achieve the magnificent results. A high standard was set for future conferences.

Dates and Places of Conferences

Although the 1959 and 1960 conferences were given space in the September issue of the JOURNAL, there have been a number of inquiries from members. Accordingly, it is believed that these bear repetition along with 1961, now decided. The definite dates and places of future conferences already determined follow:

1959 – Rice Hotel	Houston, Texas	October 25-29 incl.
1960 – Statler Hilton Hotel	New York, New York	September 5-9 incl.
1961 – Olympic Western Hotel	Seattle, Washington	September 4-8 incl.

Many members will be interested in the fact the Executive Committee is seriously considering a resort area as the site of the 1962 conference.

It will be noted the 1960 and 1961 conferences begin in each case on Labor Day. These early dates should find favor among those members who find it more difficult and, in some cases, practically impossible to attend at a later time. Furthermore, there is assurance that bad driving conditions, often probable when conferences are held in northern locations in late Fall, will be avoided. This would particularly be true in the case of Seattle. Those members who do not yet know will be interested in the fact that a World's Fair is being planned in Seattle in 1961. The ground is already broken. Preparations are going forward on a gigantic scale. This, together with the change to the northwest in geographical location, was an impelling reason which influenced the officers and the Executive Committee in deciding on Seattle. Your Executive Director has visited the Olympic Western Hotel and can assure the membership it is a fine modern hostelry ample in number of rooms for guests and with proper meeting facilities and adequate accommodations for all functions.

Officers and Executive Committee

Your Executive Director enjoyed his service under President H. Kenneth Allen in the latter's splendid administration of the affairs of the Association in the past year. He, along with the 1957 President, Mr. J. L. Reuther, will remain

on the Executive Committee so their valuable aid and advice will continue. Larry was unable to attend the Philadelphia Conference because of his doctor's orders. However, his many friends will be glad to know he is on the mend and will certainly be at Houston.

It will be recalled that Leo Mattersdorf, who was elected Secretary of the National Tax Association at Columbus last year, also was appointed Treasurer by the Executive Committee to fill out the unexpired term of the late E. L. Brickhouse. At Philadelphia Leo was re-elected Secretary while Lee P. Miller, President of the Citizens Fidelity Bank and Trust Company of Louisville, Kentucky, was elected Treasurer. Lee, well known among members of NTA, is also President of the American Bankers Association.

The terms of four members of the Executive Committee expired at Philadelphia. One of them, Walter W. Walsh, became Vice-President by election and will, therefore, continue *ex officio* as a member. The others, J. Keith Butters, Lawton B. Chandler, and William G. Herzel will be greatly missed but all will continue their interest in the Association. The names of their successors (Thomas A. Byrne, E. L. Maynard, Donald C. Miller, and Theodore K. Warner, Jr.) appear on the back cover of the JOURNAL. They, too, are a splendid group.

A. K. Eaton, one of the honorary members from Canada, who served long and well, retired from his prominent position with the Canadian government. He was replaced by Ronald M. Burns, also of the Government of Canada.

Ronald B. Welch, whose service to National Tax Association over the years has been invaluable, and who remains on the Executive Committee, was recently made Assistant Executive Secretary of the California Board of Equalization where he was formerly Director of the Division of Research and Statistics.

Executive Committee Meeting

President Bowers has called a meeting of the Executive Committee starting promptly at 9:00 A.M. (C.S.T.) Tuesday, February 3, 1959 in Rooms 521 and 522, Conrad Hilton Hotel, Chicago, Illinois.

Membership

President Bowers has covered this subject in his "Notes." He has asked you to use the application card in the JOURNAL. He refers to the attached, one side of which is an *Application for Membership* and the other side is a *Recommendation of a Prospective Member*. If this latter side is used, the card should be mailed to Walter W. Walsh, Chairman, Membership Committee, c/o Chapman, Walsh and O'Connell, 122 E. 42nd Street, New York 15, New York.

WALTER J. KRESS, *Executive Director*
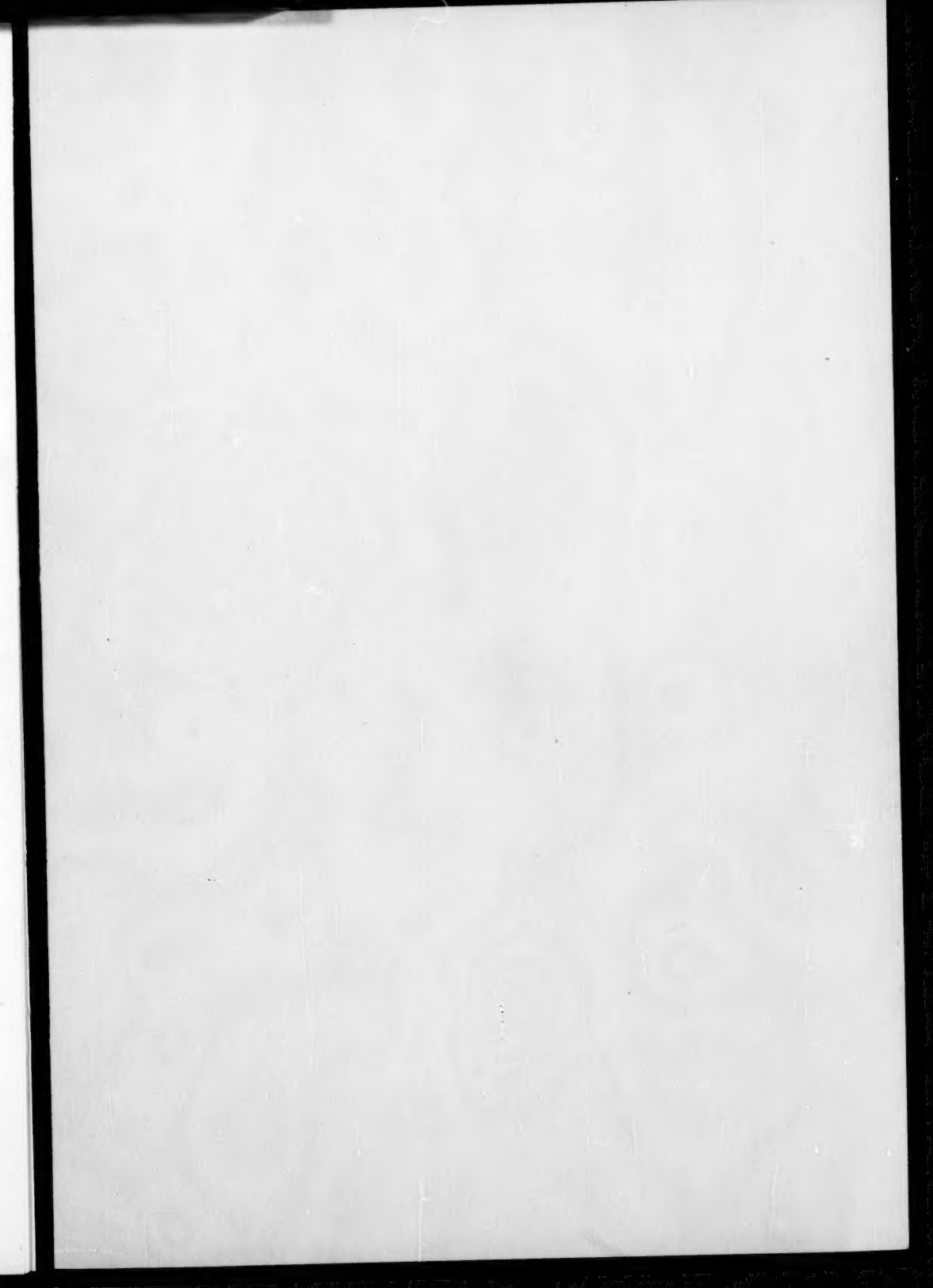
NATIONAL TAX ASSOCIATION

Organized 1907—Incorporated 1930

OBJECT. The National Tax Association is a non-political, non-sectarian, and non-profit-making educational organization. Its object, as stated in its certificate of incorporation, is to educate and benefit its members and others by promoting the scientific study of taxation and public finance; by encouraging research; by collecting, preserving, and diffusing scientific information; by organizing conferences; by appointing committees for the investigation of special problems; by formulating and announcing, through the deliberately expressed opinion of its conferences, the best informed thought and ripest administrative experience available; and by promoting better understanding of the common interests of national, state, and local governments in the United States and elsewhere, in matters of taxation and public finance and interstate and international comity in taxation.

MEMBERSHIPS. The Association welcomes to its membership, for mutual discussion and deliberation, all who may be interested in taxation and public finance generally. Annual dues are: memberships for students in recognized institutions of higher learning, $10; memberships for government agencies, schools, and persons receiving more than one-half of their income from employment by such agencies or schools, $10; memberships for other individuals and unincorporated entities, $25; corporate memberships, $100; persons wishing to contribute more liberally to the support of the Association, $100 to $1000.

PUBLICATIONS. The NATIONAL TAX JOURNAL is published quarterly in March, June, September, and December. PROCEEDINGS of the annual conferences on taxation which are sponsored by the Association are published soon after the meetings. The JOURNAL and the PROCEEDINGS are sent to members without charge. To non-members the price of the JOURNAL is $5.00 per year, single numbers, $1.50. The prices of the PROCEEDINGS vary; that of the 1957 volume is $10.50.

Applications for membership, orders for publications, and general inquiries should be addressed to Walter J. Kress, Executive Director, National Tax Association, 905 Payne-Shoemaker Building, Harrisburg, Pennsylvania.